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THE BEACON

Containing

SHORTEE INSTRUCTION

In the Art of Navigation,

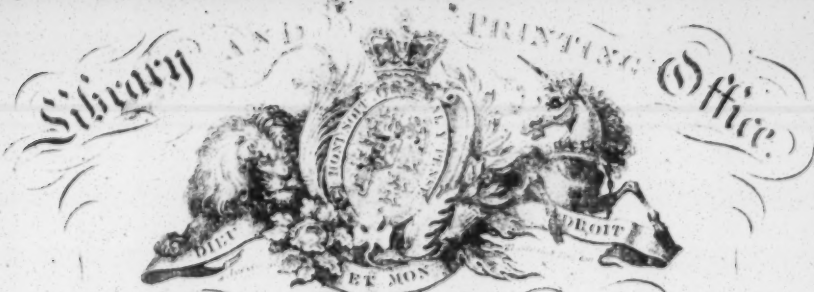
By WILLIAM JOHNSON BLAEV,

And Translated out of Dutch into English,

By RICHARD HYNERS.



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SEA-BEACON

Containing

A BRIEF INSTRUCTION

In the Art of Navigation,

Written by WILLIAM JOHNSON BLAEV,

And Translated out of Dutch into English,

By RICHARD HYNMERS.

1890

C.F.B. 11

THE
SEA-BEACON

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A BRIEF INSTRUCTION
In the Art of Navigation;

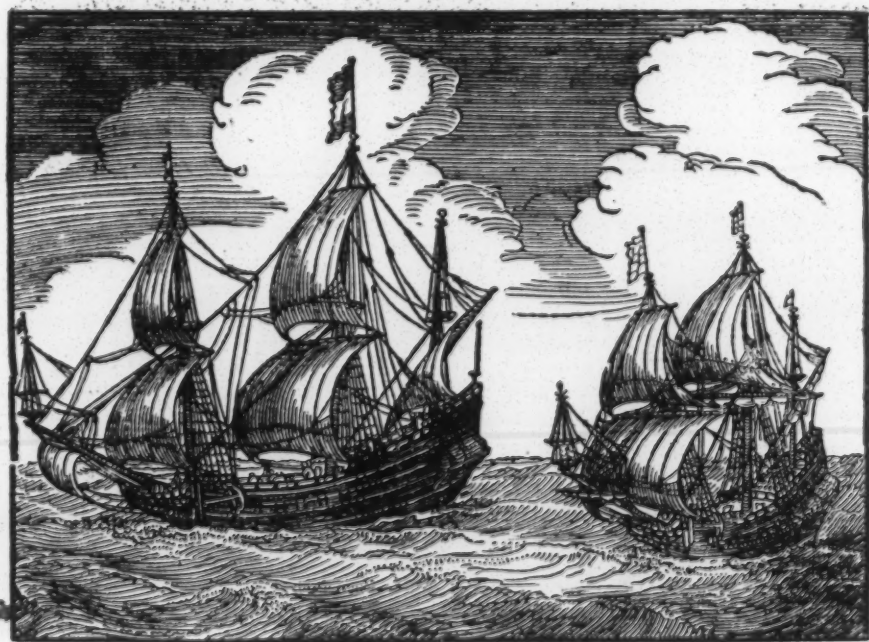
AND
THE DESCRIPTION OF THE
Seas and Coasts of the Easterne, Northerne,
and Western Navigation;

COLLECTED AND COMPILED TOGETHER
Out of the Discoveries of many Skilfull and expert Sea-men,

BY
WILLIAM IOHNSON BLAEV,

And Translated out of *Dutch* into *English*,
By RICHARD HYNMERS.

*Newly augmented and corrected of many faults, and sundry things which were here and there defective added,
and of many passages and marks which were amisse in the former addition enlarged, and renewed.*



AMSTERDAM,

Printed by IOHN WILLIAMSON BLAEV, dwelling upon the Water, by
the Old Bridge, at the Signe of the Golden Sunne-Dyall.

CIO IO CXLIII

Cum Privilegio.



A BRIEFVE INSTRUCTION IN THE ART OF NAVIGATION.



The Art of Navigation is a knowledge by certaine rules for to guyde a Ship through the Sea from the one place to the other, and may (not improperly) be devided into two parts, Namely, Into the Common & Great Navigation.

The Common Navigation requires the use of no Instruments but the Compasse and Sounding Lead, as chiefly consisting in Practice and Experience, in knowledge of Lands and Points, how they ly in distance and course one from the other, and how they are knowne at Sea, in knowledge of Depths and Showldes, and varieties of Grounds, the course and setting of Tydes, upon what Point of the Compasse the Moone maketh high Water in each severall place, and the like: which must be learned partly by the information of skilfull Pilotes, but especially by mens owne proper practice and experience.

The Great Navigation useth (besides the foresaid common practice) divers other artificiall Instruments & rules, which they must take out of Astronomie and Cosmography. It is therefore needfull that every Pilote that will use and practice the Great Navigation, be first and chiefly well instructed in the principall points of the foresaid Arts: That is, That he know and understand the order and deviation of the Spheare of the World, the motion of the Heavens, especially of the eight, fourth, and first, together with the contriving or making a use of Instruments, without which knowledge it is impossible happely to performe great voyages (not before attempted) over the Ocean Sea: and in regard such knowledges may be attained to, by good instruction we have set forth the same in this Treatise, for the benefite of all such young Seafaring-men as are desirous to learne the Art of Navigation, so clearly and plainly as the brevitye of the same could suffer to be done.

C H A P. I.

Of the Spheare and the severall different motions of the same.

A Spheare is properly as much to say as a Globe, whole, fast, and round, whose superfiiall or upper part is every where alike distant from his Center.

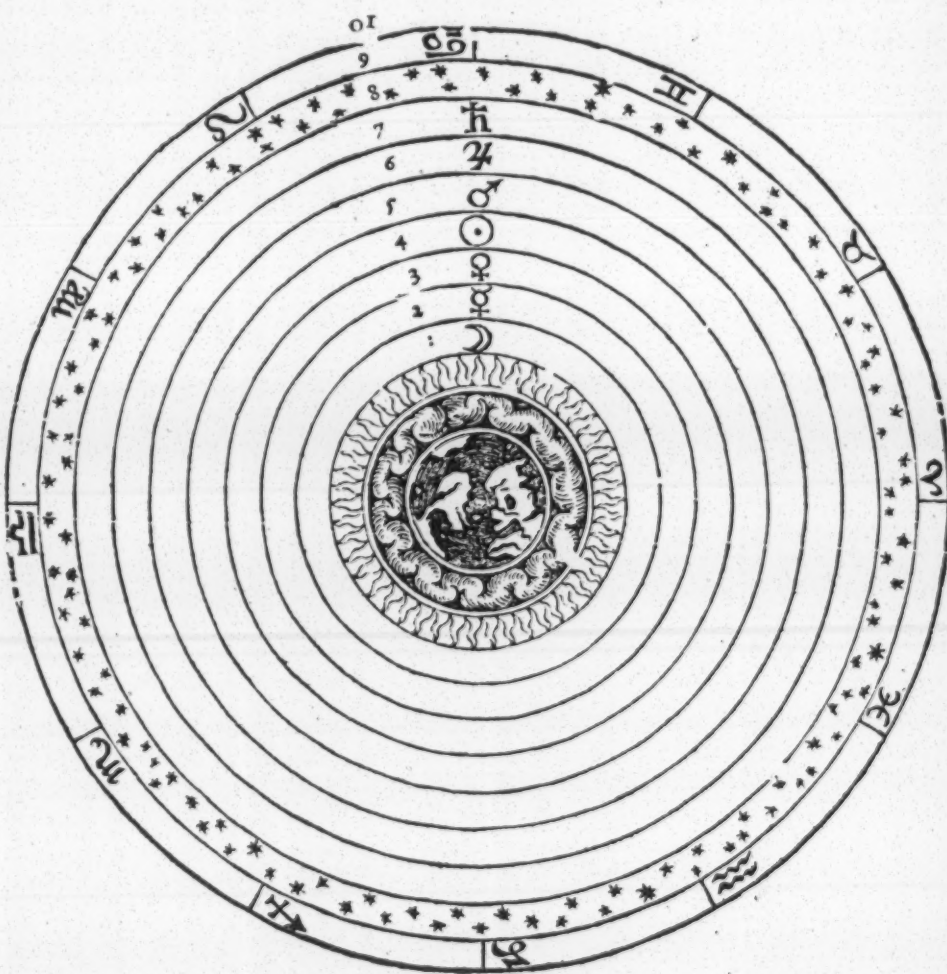
By the Word *Sphæra Mundi*, or Spheare of the World, is commonly understood the whole Globe of the Heavens with all that therein is contained, which is devided into two parts, Elementall and Coelestiall. The Elementall part hath againe foure parts, The first is the Earth, which with the Water as the second maketh a perfect round Globe, where upon we dwell; The third the Ayre comprehending the Earth: and the fourth the Fire, which according to the opinion of the Philosophers, containeth the space which is betweene the Ayre the Heaven or Circle of the Moone. Out of these Elements (which are the beginnings of all things, that are alwayes subject to change) together with the warmth of the Heavens: all things doe come forth, and decay, which we see and finde upon the Earth, by continuall change and motion of the one into the other.

The Coelestiall part (containing within the concavities thereof, the Elementall) is transparent and perspicuous, shining, severd, and free from all mutabilitie, and is devided into eight Spheares or round hollow Globes, which are called Heavens, whereof the greatest doth alwaies containe the next unto it Globelike. The seven inferiour have each of them but one Starre or Planet only, whereof the first (the next to the Earth) is the Heaven of the Moone, the second of Mercurie, the third of Venus, the fourth of the Sunne, the fifth of Mars, the sixth of Iupiter, the seventh of Saturne, and the eighth, of all the fixed Starres. The number of these Heavens are knowne by their courses round

about the Poles of the Zodiacke. The Moone runneth through her Heaven by her naturall course from the West to the East in seven and twenty dayes eight houres. Mercurie, Venus, and the Sunne their course in one yeere. Mars his course in two yeeres. Iupiter in twelve, and Saturne in thirty yeeres. The eight Heaven accomplisheth his proper course according to the observation of Ticho Brahe, in 25400 yeeres.

These Heavens are carried altogether in foure and twenty houres upon the Poles about the Axeltree of the World, through the ninth Heaven, which is called Primum mobile, that is, the First moveable, by which motion to our appearance is caused the day and night, and the daily rising and setting of the Coelestiall Lights.

The Spheare is demonstrated with this Figure.



C H A P. II.

Of the roundnesse of the Earth.

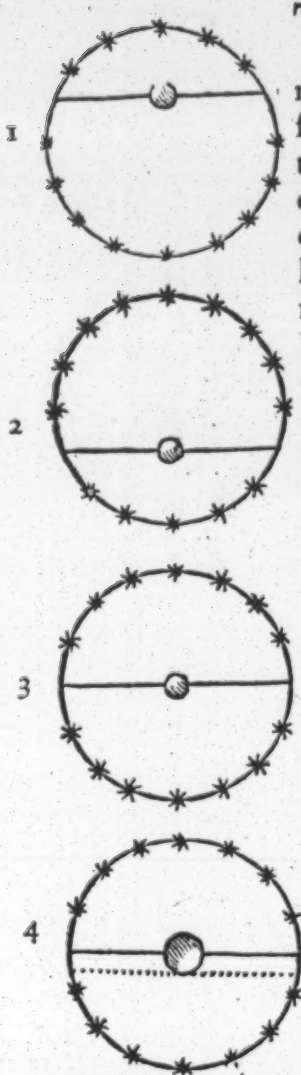
THat the Earth with the Water together, is a round Globe, it appeareth (besides what experience hath taught us herein) very evidently by the shadow of the Earth in the Eclips of the Moone. For in what place soever of the Heavens the Moone is eclipsed, or touched by the shadow of the Earth; the shadow doth show it selfe alwayes to be round. If the Earth were either foure square, or three corner'd, or of any other forme, the shadow in the Moone should be also foure square, three corner'd, or of another forme. For of such forme as any body is, such is also the shadow thereof. Seeing then the shadow of the Earth is alwayes and on every side round, the Earth it selfe must be also necessarily in like manner round.

That the Heaven is round, we can perceive with our eyes, but it is indeed most evidently knowne by the Circular motion of the Celestiall Lights, as of the Sunne, Moone, and Starres.

C H A P. III.

A declaration of the Figure.

That the Earth is in the midst of the World.



THat the Earth standeth in the midst of the World, may very well be understood by this which followeth. If so be that the Globe of the Earth did not stand in the midst of the World, but neerer to the one side of the Heaven, it should happen that the Starres in their daily revolution, should be neerer the Earth on the one side then on the other, and therefore should shewe to our sight greater on the one side then on the other. And also, if that part of the Heaven neereft the Earth were above us, then we should see lesse then the halfe of the Heaven, according as is shewed in the first Figure. And to the contrarie, if that part of the Heaven farthest from us were above us, then we should see more then the one halfe of the Heaven, as is shewed by the second Figure: But standing upon the flatte of the Globe of the Earth, wee see the Starres (in what part so ever of the Heaven that they be) alwayes of one greatnesse; and by experience it is manifest, that we alwayes see just the one halfe of the Heaven, and the other halfe is hidden from our sight, whence it is evident as is shewed in this third Figure, that the Earth standeth in the midst of the World. Also thereby may be understood, that the Globe of the Earth in comparison of the Heaven is no more then a point without thicknesse; For if the Earth had any thicknesse in comparison of the Heaven, we should by occasion thereof (standing upon the Earth) not be able to see the one halfe of the Heaven, as is shewed by this fourth Figure.

C H A P. IV.

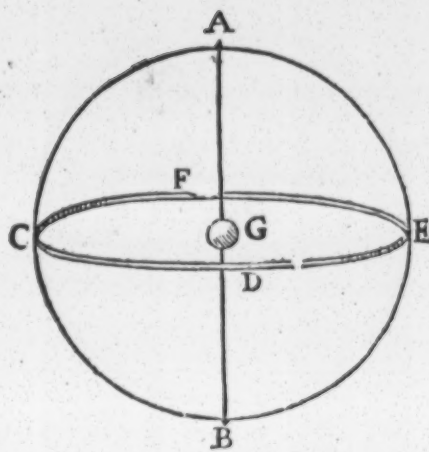
Of the greatnesse of the Earth.

Although the Globe of the Earth (as hath beene said) in comparison of the exceeding great spacioufnesse of the Heavens, is no more then as a point or pricke, yet notwithstanding being considered in it selfe, it is a great body, containing in the greatest circuite of it, 7200 English leagues, which may be thus knowne. If you deuide the whole Circle of the Globe of the Earth into 360 parts or degrees, it is found as well by Navigation, as by measuring upon the Land, that every such part or degree containeth twenty such English Leagues. Three hundred and sixty such parts or degrees, then being multiplied by twenty, produce 7200 Leagues.

C H A P. V.

Of the Axis and Poles, or Axelpoints of the World.

IN the Spheare of the World there is imagined a Line going from one point on the one side of the Spheare as a Diameter through the Center unto another point right over against it on the other side: Such a Line is called the Axeltree, and the uttermost ends of it, or foresaid points are called the Poles or Axeltree points of the World, the one in the North the North Pole, & the other in the South the South Pole. Vpon which Poles it is imagined that the Spheare is daily mooved about her Axeltree.



The Line AGC in this Figure going from the Point A through the Center G, as a Diameter to the Point B over against it, sheweth the Axeltree of the World, and the Points A and B the Poles, A Northwards the North Pole, & B Southwards the South Pole.

C H A P. VI.

Of the Equinoctiall Line.

IN the midst of the Heavens equally distant from both the Poles, there is imagined a great Circle, deviding the whole Spheare into two equall parts, which is called the Equinoctiall, because that when the Sunne commeth to or under that Circle (the which it doth the 22 of March, and the 23 of September) the day and night are every where upon the Earth of a like length. The knowledge of this Circle is above all others necessarie in the Art of Navigation, for to observe thereby how farre we are distant (either northwards or southwards) upon the Earth from the same, also thereby the times and houres of the day are reckoned, the Declination of the Sunne and the Starres, and many other profitable observations.

A declaration.

In the former Figure are A and B the Poles of the World, C D E F is the Equinoctiall Line, in the midst of the Heaven equally distant from both the Poles A and B which devideth the whole Spheare A C B E into two equall parts, as C A E the Norther, and C B E the Souther part.

Hence it appeareth, that the whole circumference of the Heaven is divided into 360 Degrees, that the Poles doe stand 180 Degrees one from the other: And betweene the Poles and the Equinoctiall, there remanes every way, and on every side 90 Degrees. This Line is drawne in the Cardes with a red Line from East to West through the beginning of the Degrees, as they are numbred either towards the North or towards the South.

C H A P. VII.

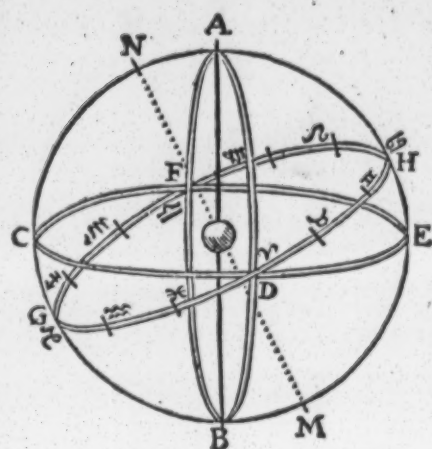
Of the Eclipticke Line, or the way of the Sunne.

THe Eclipticke Line lieth oblique over the Equinoctiall, deviding the same upon two points, right against one another into two equall parts, and is also divided by the same into two equall parts, the one lieth betweene the Equinoctiall and the North Pole; the other betweene the Equinoctiall and the South Pole. His greatest declination on either side of the Equinoctiall towards both the Poles, is 23 Degrees 31 $\frac{1}{4}$ Minutes, & is divided into twelve equall parts, and each of them hath a particuler signe ascribed to it. The Sunne goeth alongst this Circle without ever declining out of it, and runneth through the same by his naturall course, once every yeere: And like as the Poles of the World doe stand every where alike farre from the Equinoctiall, so also hath this Eclipticke Line his two Poles every where alike farre distant from the same.

A declaration.

In this Figure as in the former, A B are the Poles of the World, C D E F the Equinoctiall, G D H F the Eclipticke Line, cutting and deviding the Equinoctiall and it selfe also into

into two equall parts in the points D & F, which are called Equinoctiums: The one at D, the Equinoctium of the Spring; the other at F the Equinoctium of the Haruest. The one halfe D H F the Norther part, and lieth betweene the Equinoctiall D E F and A the Norther Pole, at the most at E H declined from it



23 Degrees 31½ Minutes; the other halfe F G D the Souther part, lieth betweene the Equinoctiall F C D and the Souther Pole B likewise at the most at C G declined from it 23 Degrees 31½ Minut. The Norther part is divided into fixe Signes, which are called the Northerne, beginning at D with the signes ascending to the Northwards, Aries, Taurus, Gemini, unto H the point of the most declination. From thence with the Signes descending from the North, Cancer, Leo, Virgo, unto the Equinoctiall Line in F the Equinoctium of the Haruest. The Souther part likewise is divided into fixe signes, which are called the Southerne, beginning at F with the Signes descending towards the South, Libra, Scorpio, Sagittarius, unto G the point of the greatest declination towards the South, from thence with the Signes ascending towards the North, Capricornus, Aquarius, Pisces, againe to the Equinoctiall Line, in the Equinoctium of the Spring D. The three first Northerne Signes, the Sunne runneth through from the 21 of March to the 21 of Iune the other from the 21 of Iune to the 23 of September. The three first Southerne from the 23 of September to the 23 of December, & the other from the 23 of December againe to the 21 of March. The Poles of the Eclipticke are M and N standing every where equally distant from the Eclipticke G H, and so farre from the Poles of the World A and B as the Eclipticke is at the most distant from the Equinoctiall Line at H E and C G.

CHAP. VIII.

Of the Colures.

Colures are two Circles going crosswise through both Poles of the World, deviding one another in the Poles in two and together the whole Spheare, Equinoctiall, Zodiacke or Eclipticke, and all the Parallels into foure equall parts, the one passing through the points of the Equinoctiums is called the Colure of the Equinoctiums; the other passeth through the points of the Solstitialls, and is called the Colure of the Solstitialls. The Sunne comming to these Circles (by his yeerely course in the Zodiacke) devideth the yeere into four quarters, as Spring, Summer, Autumne, and Winter.

A declaration.

In this former Figure is A F B D the Colure of the Equinoctiums, passing through D and F the points of the Equinoctiums in the beginnings of Aries and Libra, and through the Poles A and B. A C G B M E H the Colure Solstitiall, passing through H and G the points of the Solstitialls, in the beginnings of Cancer and Capricornus, where the Eclipticke is most distant from the Equinoctiall Line, through the Poles of the World A and B, and through the Poles of the Zodiacke M and N cutting through one another crosse-wise with right Angles in the Poles A and B, and deviding the Zodiacke or Eclipticke into foure parts, as D H, H F, F G, and G D, the first whereof the Sunne passeth through in the Spring, the second in the Summer, the third in the Haruest, and the fourth in the Winter.

These foresaid Circles of the Spheare are all great Circles that are drawne in the widest part of the Spheare, devi-

ding the same alwayes into two equall parts. There follow yet foure small Circles, which deuide the Spheare into unequal parts.

CHAP. IX.

Of the Tropickes and Circles Articke and Antarticke.

The Tropicks are two Circles, the one Northwards, the other Southwards from the Equinoctiall and parallel with the same, which by the motion round about of the Spheare are drawne from the points of the Eclipticke Line farthest distant from the Equinoctiall, the one towards the North the Tropicke of Cancer, the other towards the South the Tropicke of Capricornus.

The Circle Articke the Norther Circle, and the Circle Antarticke the Souther Circle are described or drawne [by the motion round about of the Spheare] of the Poles of the Eclipticke.

A declaration.

In this Figure H I the Tropicke of Cancer or the Sunnes turning of Cancer, which by the motion round about of the Spheare is described from the point H the beginning of Cancer, and is so called because that the Sunne comming to that point, and being at the farthest from the Equinoctiall towards the North, then turneth againe through Cancer, towards the Equinoctiall. G K is the Tropicke of Capricornus, or Sunnes turning of Capricornus, and is described by the motion round about of the Spheare from the point G the beginning of Capricornus, and is so called because, that the Sunne comming to that point and being at the farthest from the Equinoctiall towards the South, then turneth againe through Capricornus towards the Equinoctiall.

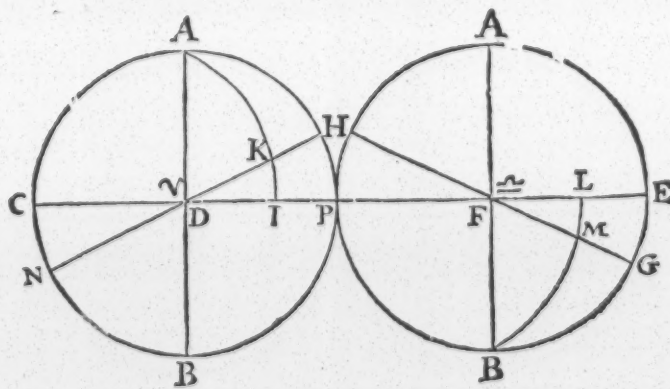
N P is the Circle Articke, and M O the Circle Antarticke which are described by the motion round about of the Spheare from the Poles of the Zodiacke N and M. These are equally distant from the Poles of the World A and B, as the Tropickes are from the Equinoctiall Line, to wit, 23 Degrees 31½ Minutes.

CHAP. X.

Of the Sunnes declination.

The Sunnes declination is his distance from the Equinoctiall Line, which is two manner of wayes, towards the North and South.

A declaration.



The declination of the Sunne is caused by his course alongst the Eclipticke Line thus: Let A be the North, and B the South Pole of the World, C P E the Equinoctiall,

C H G the Eclipticke Line. The Sunne on the 21 of March comming in the beginning of Aries at D, commeth also into the Equinoctiall Line, by reason whereof hath no declination, neither Northwards nor Southwards, but passing forth alongst the Eclipticke from D towards H, and coming unto K, in the beginning of Taurus, he shall be declined from the Equinoctiall Line towards the North from I to K 11 Degrees 30 Minutes. Proceeding till he come to H, is then at the farthest declined from P to H 23 Degrees 31½ Minutes. From thence prosecuting his course from H to F, he commeth againe to the Line into the beginning of Libra, without declination. Proceeding from F towards G unto M the beginning of Sagittarie, he shall be declined from the Line F E, towards the South from I. to M 20 Degrees 13 Minutes. Comming to G, he is from B to G at the farthest declined Southwards. From thence he takes his course unto D againe to the Equinoctiall Line, fully accomplishing his course in one yeere.

C H A P. X I.

For to finde the Sunnes declination upon every day of the yeere.

THe Sunnes yeere (that is the time that the Sunne goeth out of a certaine point in the Eclipticke, and returneth againe into the same) is not of 365 dayes just, but about 5 houres & 49 minutes more (that is a little lesse then 6 houres) wherefore after three yeeres there is alwayes added to the fourth foure times sixe houres, that is a day more in February, for to count the yeere or the revolution of the Sunne in even dayes, therefore that fourth yeere is called Leape yeere. If men will then describe the Declination of the Sunne in Tables for every severall day, it shall be needfull that there be foure severall Tables made, of foure such yeeres following one the other. The foresaid difference, that foure revolutions of the Sunne, doe not justly agree with foure such yeeres, bringeth in processe of time so great a difference in the declination, that it is needfull every twenty yeeres to renew such Tables.

For to finde the declination of the Sunne upon every day out of such Tables, two things are necessarie to beknowne: The first in what yeere we are in, whether in the Leape yeere, or in the first, second or third following, The second, what Table must be used to such a knowne yeere.

For the first, devide the yeere of our Lord above 1600 by 4, If the devision doe fall out even without any overplus, that yeere then is a Leape yeere of 366 dayes: But if out of the devision there remaine any number, that remainder sheweth how many yeeres that yeere propounded is after the Leape yeere.

1 Example.

I desire to know what yeere, the yeere 1648 is. Leaving the 1600, I devide the 48 by 4, and it commeth even out

without any remaining overplus, for 12 times 4 is 48 whereby I finde that the yeere 1648 is a Leape yeere.

2 Example.

For to know what yeere the yeere 1647 is, Leaving the 1600 I devide the 47 by 4, and finde that there remains 3, for 11 times 4 is 44 that from 47 remains 3, whereby I finde the yeere of 47 to be the third yeere after the Leape yeere.

For to know the same without reckoning, behold this Table following, the first Columnne are Leape yeeres, the 2, 3, and 4 are the three yeeres after the Leape yeeres.

Leape yeeres.	First.	Second.	Third.
1644	1645	1646	1647
1648	1649	1650	1651
1652	1653	1654	1655
1656	1657	1658	1659

The Second: For to know what Table must be used for each yeere that standeth written above each of the Tables following.

1 Example.

I desire to know the declination of the Sunne, on the 20 of May, in the second yeere after the Leape yeere: I seeke in the Tables in the second yeere, the moneth May, and there under in the first Columnne of the Ciphers the 20 day, I finde right against it in the second Columnne 20-6, that is 20 Degrees, 6 Minutes, the declination of the Sunne, and seeing that is betweene the 20 of March and the 23 of September (that the Sunne is to the Northwards of the Line) the declination is Northerly.

2 Example.

Vpon the 12 of February of the Leape yeere, I desire to know the declination of the Sunne, I seeke therefore in the Table of the Leape yeere the moneth February, and finde in the first Columnne the 12 day, and right against it 13 Degrees 43 Minutes for the declination of the Sunne upon that day, and seeing that is between the 23 of September & 20 of March, that the Sunne goeth to the Southwards of the Line, the declination is Southerly.

Here follow the Tables of the declination of the Sunne, calculated properly for the Longitude or Meridian of the Landsend of ENGLAND, because that there they are most used about that Longitude by English and such Seafaring men, as well in the entring of the Channell of the Sea, as alongst the Coasts of FRANCE, PORTUGALL, and SPAIGNE, they may be able to serve without any great prejudice or hurt for twenty yeere.

A Table of the Declination of the Sunne according to the New Stile,

For the Leape yeere.

Ianua.	Februa.	March.	April.	May.	Iune.	Iuly.	August.	Septem.	Octob.	Novēb.	Decēb.
da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.
1 23 5	1 17 8	1 7 13	1 4 55	1 15 22	1 22 13	1 23 9	1 17 57	1 8 6	1 3 27	1 14 44	1 22 1
2 23 0	2 16 51	2 6 50	2 5 18	2 15 40	2 22 21	2 23 5	2 17 42	2 7 43	2 3 51	2 15 3	2 22 10
3 22 54	3 16 33	3 6 27	3 5 41	3 15 57	3 22 28	3 23 0	3 17 26	3 7 21	3 4 14	3 15 22	3 22 18
4 22 48	4 16 16	4 6 4	4 6 4	4 16 14	4 22 35	4 22 55	4 17 10	4 6 59	4 4 38	4 15 41	4 22 26
5 22 41	5 15 57	5 5 41	5 6 27	5 16 31	5 22 42	5 22 49	5 16 54	5 6 37	5 5 1	5 15 59	5 22 34
6 22 34	6 15 39	6 5 17	6 6 50	6 16 48	6 22 48	6 22 43	6 16 37	6 6 14	6 5 24	6 16 17	6 22 41
7 22 27	7 15 20	7 4 54	7 7 12	7 17 5	7 22 54	7 22 37	7 16 20	7 5 52	7 5 47	7 16 35	7 22 47
8 22 19	8 15 1	8 4 30	8 7 34	8 17 21	8 22 59	8 22 30	8 16 3	8 5 29	8 6 10	8 16 52	8 22 54
9 22 10	9 14 42	9 4 7	9 7 57	9 17 37	9 23 4	9 22 23	9 15 46	9 5 6	9 6 33	9 17 9	9 22 59
10 22 2	10 14 22	10 3 43	10 8 19	10 17 52	10 23 8	10 22 15	10 15 28	10 4 43	10 6 56	10 17 25	10 23 4
11 21 52	11 14 3	11 3 19	11 8 41	11 18 8	11 23 13	11 22 7	11 15 10	11 4 20	11 7 19	11 17 42	11 23 9
12 21 43	12 13 43	12 2 56	12 9 2	12 18 23	12 23 16	12 21 58	12 14 52	12 3 57	12 7 42	12 17 58	12 23 14
13 21 33	13 13 23	13 2 32	13 9 24	13 18 37	13 23 20	13 21 50	13 14 33	13 3 34	13 8 5	13 18 14	13 23 18
14 21 22	14 13 2	14 2 9	14 9 46	14 18 52	14 23 23	14 21 41	14 14 14	14 3 11	14 8 27	14 18 30	14 23 21
15 21 11	15 12 41	15 1 45	15 10 7	15 19 6	15 23 25	15 21 31	15 13 55	15 2 48	15 8 49	15 18 45	15 23 24
16 21 0	16 12 21	16 1 21	16 10 28	16 19 19	16 23 27	16 21 21	16 13 36	16 2 25	16 9 11	16 19 0	16 23 26
17 20 48	17 12 0	17 0 58	17 10 49	17 19 33	17 23 29	17 21 11	17 13 17	17 2 1	17 9 33	17 19 15	17 23 28
18 20 36	18 11 39	18 0 34	18 11 10	18 19 46	18 23 30	18 21 1	18 12 58	18 1 38	18 9 55	18 19 29	18 23 30
19 20 24	19 11 18	19 0 10	19 11 31	19 19 59	19 23 31	19 20 50	19 12 38	19 1 15	19 10 17	19 19 43	19 23 31
20 20 11	20 10 56	Equin.	20 11 51	20 20 11	20 23 31	20 20 39	20 12 18	20 0 51	20 10 39	20 19 57	20 23 31
21 19 57	21 10 35	Equin.	21 12 11	21 20 23	21 23 31	21 20 27	21 11 58	21 0 27	21 11 0	21 20 10	21 23 31
22 19 44	22 10 13	20 0 13	22 12 31	22 20 35	22 23 31	22 20 15	22 11 37	22 0 4	22 11 21	22 20 23	22 23 31
23 19 30	23 9 51	21 0 37	23 12 51	23 20 47	23 23 30	23 20 2	23 11 17	Equin.	23 11 42	23 20 36	23 23 30
24 19 15	24 9 29	22 1 1	24 13 11	24 20 58	24 23 29	24 19 50	24 10 56	23 0 20	24 12 3	24 20 48	24 23 29
25 19 1	25 9 6	23 1 25	25 13 31	25 21 8	25 23 28	25 19 37	25 10 36	24 0 43	25 12 24	25 20 59	25 23 27
26 18 45	26 8 44	24 1 49	26 13 50	26 21 19	26 23 26	26 19 24	26 10 15	25 1 6	26 12 45	26 21 11	26 23 25
27 18 30	27 8 21	25 1 12	27 14 9	27 21 29	27 23 23	27 19 10	27 9 53	26 1 30	27 13 6	27 21 22	27 23 22
28 18 14	28 7 59	26 2 36	28 14 28	28 21 39	28 23 20	28 18 56	28 9 32	27 1 54	28 13 26	28 21 32	28 23 19
29 17 58	29 7 36	27 3 0	29 14 46	29 21 48	29 23 17	29 18 42	29 9 11	28 2 17	29 13 46	29 21 42	29 23 15
30 17 42		28 3 23	30 15 4	30 21 56	30 23 13	30 18 27	30 8 49	29 2 41	30 14 6	30 21 52	30 23 11
31 17 25		29 3 46		31 22 5		31 18 12	31 8 27	30 3 4	31 14 25		31 23 6
		30 4 9									
		31 4 32									

For the First yeere after the Leape yeere.

Ianua.	Februa.	March.	April.	May.	Iune.	Iuly.	August.	Septem.	Octob.	Novēb.	Decēb.
da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.
1 23 1	1 16 55	1 7 18	1 4 49	1 15 18	1 22 11	1 23 11	1 18 0	1 8 11	1 3 21	1 14 39	1 21 59
2 22 55	2 16 37	2 6 55	2 5 12	2 15 36	2 22 19	2 23 6	2 17 45	2 7 49	2 3 44	2 14 58	2 22 8
3 22 50	3 16 19	3 6 32	3 5 35	3 15 53	3 22 26	3 23 1	3 17 29	3 7 27	3 4 8	3 15 17	3 22 16
4 22 42	4 16 1	4 6 9	4 5 58	4 16 11	4 22 33	4 22 56	4 17 13	4 7 5	4 4 31	4 15 36	4 22 24
5 22 35	5 15 43	5 5 46	5 6 21	5 16 28	5 22 40	5 22 51	5 16 57	5 6 43	5 4 54	5 15 54	5 22 32
6 22 28	6 15 24	6 5 23	6 6 43	6 16 44	6 22 46	6 22 45	6 16 41	6 6 20	6 5 18	6 16 12	6 22 39
7 22 20	7 15 5	7 4 59	7 7 5	7 17 1	7 22 52	7 22 38	7 16 23	7 5 58	7 5 41	7 16 30	7 22 46
8 22 12	8 14 46	8 4 36	8 7 28	8 17 17	8 22 57	8 22 31	8 16 6	8 5 35	8 6 4	8 16 48	8 22 52
9 22 3	9 14 27	9 4 12	9 7 59	9 17 33	9 23 3	9 22 24	9 15 49	9 5 12	9 6 27	9 17 5	9 22 58
10 21 54	10 14 7	10 3 49	10 8 13	10 17 49	10 23 7	10 22 17	10 15 32	10 4 50	10 6 50	10 17 22	10 23 3
11 21 44	11 13 48	11 3 25	11 8 35	11 18 4	11 23 11	11 22 9	11 15 14	11 4 27	11 7 13	11 17 39	11 23 8
12 21 35	12 13 28	12 3 2	12 8 56	12 18 19	12 23 15	12 22 0	12 14 56	12 4 3	12 7 35	12 17 55	12 23 13
13 21 24	13 13 7	13 2 38	13 9 18	13 18 34	13 23 19	13 21 51	13 14 38	13 3 41	13 7 58	13 18 11	13 23 17
14 21 13	14 12 47	14 2 15	14 9 40	14 18 49	14 23 22	14 21 42	14 14 19	14 3 17	14 8 20	14 18 27	14 23 20
15 21 2	15 12 26	15 1 51	15 10 1	15 19 3	15 23 24	15 21 33	15 14 0	15 2 54	15 8 43	15 18 42	15 23 23
16 20 51	16 12 5	16 1 27	16 10 22	16 19 17	16 23 27	16 21 23	16 13 41	16 2 31	16 9 5	16 18 58	16 23 26
17 20 39	17 11 44	17 1 3	17 10 44	17 19 31	17 23 29	17 21 13	17 13 21	17 2 7	17 9 27	17 19 12	17 23 28
18 20 26	18 11 23	18 0 40	18 11 4	18 19 44	18 23 30	18 21 2	18 13 3	18 1 44	18 9 49	18 19 27	18 23 29
19 20 13	19 11 1	19 0 16	19 11 25	19 19 57	19 23 31	19 20 51	19 12 43	19 1 21	19 10 11	19 19 41	19 23 31
20 20 1	20 10 40	Equin.	20 11 46	20 20 9	20 23 31	20 20 40	20 12 23	20 0 57	20 10 33	20 19 54	20 23 31
21 19 47	21 10 18	Equin.	21 12 6	21 20 21	21 23 31	21 20 29	21 12 3	21 0 34	21 10 54	21 20 8	21 23 31
22 19 33	22 9 56	20 0 24	22 12 27	22 20 33	22 23 31	22 20 17	22 11 43	22 0 10	22 11 16	22 20 21	22 23 31
23 19 18	23 9 35	21 0 31	23 12 46	23 20 45	23 23 30	23 20 5	23 11 23	Equin.	23 11 37	23 20 33	23 23 30
24 19 4	24 9 12	22 0 55	24 13 6	24 20 56	24 23 29	24 19 52	24 11 2	Equin.	24 11 58	24 20 45	24 23 29
25 18 49	25 8 49	23 1 19	25 13 25	25 21 6	25 23 28	25 19 39	25 10 41	23 0 13	25 12 19	25 20 57	25 23 28
26 18 34	26 8 27	24 1 42	26 13 45	26 21 17	26 23 26	26 19 26	26 10 20	24 0 37	26 12 39	26 21 9	26 23 25
27 18 18	27 8 4	25 2 6	27 14 4	27 21 27	27 23 24	27 19 12	27 9 59	25 1 0	27 13 0	27 21 20	27 23 23
28 18 2	28 7 41	26 2 29	28 14 23	28 21 37	28 23 21	28 18 59	28 9 38	26 1 24	28 13 20	28 21 30	28 23 20
29 17 46		27 2 53	29 14 41	29 21 46	29 23 18	29 18 44	29 9 17	27 1 47	29 13 40	29 21 40	29 23 16
30 17 29		28 3 16	30 15 0	30 21 55	30 23 14	30 18 30	30 8 55	28 2 11	30 14 0	30 21 50	30 23 12
31 17 12		29 3 40		31 22 4		31 18 15	31 8 33	29 2 34	31 14 20		31 23 7
		30 4 3						30 2 58			
		31 4 26									

A Table of the Declination of the Sunne according to the New Stile,
For the Second yeere after the Leape yeere.

Ianua.	Februa.	March.	Aprill.	May.	Iune.	Iuly.	August.	Septem.	Octob.	Novēb.	Decēb.
da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.
1 23 3	1 16 59	1 7 24	1 4 43	1 15 13	1 22 10	1 23 11	1 18 4	1 8 17	1 3 16	1 14 35	1 21 57
2 22 57	2 16 42	2 7 1	2 5 7	2 15 31	2 22 17	2 23 7	2 17 49	2 7 55	2 3 39	2 14 54	2 22 6
3 22 51	3 16 24	3 6 38	3 5 30	3 15 49	3 22 24	3 23 3	3 17 33	3 7 33	3 4 2	3 15 13	3 22 14
4 22 45	4 16 6	4 6 15	4 5 53	4 16 6	4 22 32	4 22 57	4 17 17	4 7 11	4 4 24	4 15 31	4 22 12
5 22 38	5 15 47	5 5 52	5 6 15	5 16 23	5 22 38	5 22 52	5 17 1	5 6 48	5 4 49	5 15 50	5 22 30
6 22 31	6 15 29	6 5 38	6 6 38	6 16 40	6 22 45	6 22 46	6 16 44	6 6 26	6 5 13	6 16 8	6 22 37
7 22 23	7 15 10	7 5 5	7 7 0	7 16 57	7 22 51	7 22 40	7 16 27	7 6 3	7 5 35	7 16 26	7 22 44
8 22 15	8 14 51	8 4 42	8 7 23	8 17 13	8 22 56	8 22 33	8 16 11	8 5 40	8 5 58	8 16 44	8 22 50
9 22 6	9 14 32	9 4 18	9 7 45	9 17 30	9 23 1	9 22 26	9 15 53	9 5 18	9 6 21	9 17 1	9 22 56
10 21 57	10 14 12	10 3 55	10 8 7	10 17 45	10 23 6	10 22 19	10 15 36	10 4 55	10 6 44	10 17 18	10 23 2
11 21 47	11 13 52	11 3 31	11 8 29	11 18 1	11 23 10	11 22 11	11 15 18	11 4 32	11 7 7	11 17 35	11 23 7
12 21 37	12 13 32	12 3 8	12 8 51	12 18 16	12 23 14	12 22 2	12 15 0	12 4 9	12 7 30	12 17 51	12 23 11
13 21 27	13 13 12	13 2 44	13 9 13	13 18 31	13 23 18	13 21 53	13 14 42	13 3 46	13 7 53	13 18 7	13 23 15
14 21 16	14 12 51	14 2 20	14 9 34	14 18 45	14 23 21	14 21 44	14 14 24	14 3 23	14 8 15	14 18 23	14 23 19
15 21 5	15 12 31	15 1 57	15 9 56	15 19 0	15 23 24	15 21 35	15 14 4	15 3 0	15 8 37	15 18 39	15 23 22
16 20 53	16 12 10	16 1 33	16 10 17	16 19 14	16 23 26	16 21 25	16 13 46	16 2 36	16 9 0	16 18 54	16 23 25
17 20 41	17 11 49	17 1 9	17 10 39	17 19 27	17 23 28	17 21 15	17 13 27	17 2 13	17 9 22	17 19 9	17 23 27
18 20 29	18 11 28	18 0 45	18 10 59	18 19 40	18 23 29	18 21 5	18 13 7	18 1 50	18 9 44	18 19 23	18 23 29
19 20 16	19 11 6	19 0 22	19 11 20	19 19 53	19 23 31	19 20 54	19 12 48	19 1 26	19 10 6	1 19 37	19 23 30
20 20 3	20 10 45	Equin.	20 11 41	20 20 6	20 23 31	20 20 43	20 12 28	20 1 3	20 10 27	20 19 51	20 23 31
21 19 50	21 10 23	20 0 2	21 12 1	21 20 18	21 23 31	21 20 32	21 12 8	21 0 39	21 10 49	21 20 4	21 23 31
22 19 36	22 10 1	21 0 26	22 12 21	22 20 30	22 23 31	22 20 20	22 11 48	Equin.	22 11 10	22 20 17	22 23 31
23 19 22	23 9 39	22 0 49	23 12 41	23 20 42	23 23 31	23 20 8	23 11 27	23 0 7	23 11 32	23 20 30	23 23 31
24 19 7	24 9 17	23 1 13	24 13 1	24 20 53	24 23 30	24 19 55	24 11 7	24 0 31	24 11 53	24 20 43	24 23 29
25 18 53	25 8 55	24 1 37	25 13 21	25 21 4	25 23 28	25 19 42	25 10 46	25 0 54	25 12 14	25 20 54	25 23 28
26 18 37	26 8 32	25 2 0	26 13 40	26 21 15	26 23 27	26 19 29	26 10 25	26 1 18	26 12 35	26 21 6	26 23 26
27 18 22	27 8 9	26 2 24	27 13 59	27 21 25	27 23 24	27 19 16	27 10 4	27 1 41	27 12 55	27 21 17	27 23 23
28 18 6	28 7 47	27 2 47	28 14 18	28 21 34	28 23 22	28 19 2	28 9 43	28 2 5	28 13 15	28 21 28	28 23 20
29 17 50		28 3 10	29 14 37	29 21 44	29 23 19	29 18 48	29 9 22	29 2 25	29 13 35	29 21 38	29 23 17
30 17 33		29 3 34	30 14 55	30 21 53	30 23 15	30 18 34	30 9 0	30 2 52	30 13 55	30 21 48	30 23 13
31 17 16		30 3 56		31 22 2		31 18 19	31 8 39		31 14 15		31 23 9

For the Thrid yeere after the Leape yeere.

Ianua.	Februa.	March.	Aprill.	May.	Iune.	Iuly.	August.	Septem.	Octob.	Novēb.	Decēb.
da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.	da. deg. mi.
1 23 4	1 17 3	1 7 30	1 4 38	1 15 9	1 22 7	1 23 13	1 18 7	1 8 22	1 3 10	1 14 30	1 21 54
2 22 58	2 16 46	2 7 7	2 5 1	2 15 27	2 22 15	2 23 9	2 17 52	2 8 0	2 3 33	2 14 49	2 22 3
3 22 52	3 16 28	3 6 43	3 5 24	3 15 45	3 22 23	3 23 4	3 17 37	3 7 38	3 3 57	3 15 8	3 22 12
4 22 46	4 16 10	4 6 21	4 5 47	4 16 2	4 22 30	4 22 59	4 17 21	4 7 16	4 4 20	4 15 27	4 22 20
5 22 40	5 15 52	5 5 57	5 6 10	5 16 19	5 22 37	5 22 53	5 17 5	5 6 54	5 4 43	5 15 45	5 22 28
6 22 33	6 15 33	6 5 34	6 6 32	6 16 36	6 22 44	6 22 48	6 16 49	6 6 31	6 5 6	6 16 4	6 22 35
7 22 25	7 15 14	7 5 11	7 6 55	7 16 53	7 22 50	7 22 41	7 16 31	7 6 9	7 5 29	7 16 22	7 22 42
8 22 17	8 14 56	8 4 47	8 7 18	8 17 10	8 22 55	8 22 35	8 16 15	8 5 46	8 5 53	8 16 39	8 22 49
9 22 8	9 14 36	9 4 23	9 7 40	9 17 26	9 23 0	9 22 28	9 15 58	9 5 23	9 6 16	9 16 57	9 22 55
10 21 59	10 14 17	10 4 0	10 8 2	10 17 41	10 23 5	10 22 20	10 15 40	10 5 0	10 6 29	10 17 14	10 23 1
11 21 49	11 13 57	11 3 37	11 8 24	11 17 57	11 23 9	11 22 12	11 15 23	11 4 38	11 7 2	11 17 31	11 23 6
12 21 39	12 13 37	12 3 13	12 8 46	12 18 12	12 23 13	12 22 4	12 15 5	12 4 16	12 7 24	12 17 47	12 23 10
13 21 29	13 13 17	13 2 49	13 9 8	13 18 27	13 23 17	13 21 55	13 14 47	13 3 52	13 7 47	13 18 3	13 23 15
14 21 19	14 12 57	14 2 26	14 9 29	14 18 42	14 23 20	14 21 47	14 14 28	14 3 29	14 8 9	14 18 19	14 23 18
15 21 7	15 12 36	15 2 3	15 9 51	15 18 56	15 23 23	15 21 38	15 14 9	15 3 5	15 8 32	15 18 35	15 23 21
16 20 56	16 12 15	16 1 39	16 10 12	16 19 10	16 23 26	16 21 28	16 13 51	16 2 42	16 8 55	16 18 50	16 23 24
17 20 44	17 11 54	17 1 15	17 10 33	17 19 24	17 23 28	17 21 18	17 13 31	17 2 19	17 9 17	17 19 5	17 23 27
18 20 32	18 11 33	18 0 51	18 10 54	18 19 37	18 23 29	18 21 7	18 13 12	18 1 55	18 9 39	18 19 20	18 23 29
19 20 20	19 11 12	19 0 27	19 11 15	19 19 50	19 23 30	19 20 57	19 12 52	19 1 22	19 10 0	19 19 34	19 23 30
20 20 7	20 10 50	Equin.	20 11 36	20 20 3	20 23 31	20 20 46	20 12 33	20 1 9	20 10 22	20 19 48	20 23 31
21 19 53	21 10 28	20 0 4	21 11 56	21 20 15	21 23 31	21 20 35	21 12 13	21 0 45	21 10 44	21 20 2	21 23 31
22 19 40	22 10 7	21 0 20	22 12 16	22 20 27	22 23 31	22 20 23	22 11 53	Equin.	22 11 5	22 20 16	22 23 31
23 19 26	23 9 45	22 0 44	23 12 36	23 20 39	23 23 31	23 20 11	23 11 33	23 0 2	23 11 27	23 20 27	23 23 31
24 19 11	24 9 22	23 1 7	24 12 56	24 20 50	24 23 30	24 19 52	24 11 12	24 0 25	24 11 48	24 20 40	24 23 30
25 18 56	25 9 0	24 1 31	25 13 16	25 21 1	25 23 29	25 19 46	25 10 51	25 0 49	25 12 9	25 20 52	25 23 29
26 18 41	26 8 37	25 1 54	26 13 35	26 21 12	26 23 27	26 19 32	26 10 30	26 1 12	26 12 30	26 21 3	26 23 27
27 18 25	27 8 15	26 2 18	27 13 55	27 21 22	27 23 25	27 19 19	27 10 9	27 1 36	27 12 50	27 21 14	27 23 24
28 18 10	28 7 52	27 2 42	28 14 13	28 21 32	28 23 22	28 19 6	28 9 48	28 2 59	28 13 10	28 21 25	28 23 21
29 17 53		28 3 5	29 14 32	29 21 42	29 23 19	29 18 51	29 9 27	29 2 23	29 13 31	29 21 36	29 23 18
30 17 37		29 3 28	30 14 51	30 21 51	30 23 16	30 18 37	30 9 5	30 2 46	30 13 52	30 21 45	30 23 14
31 17 21		30 3 50		31 22 0		31 18 22	31 8 44		31 14 11		31 23 10

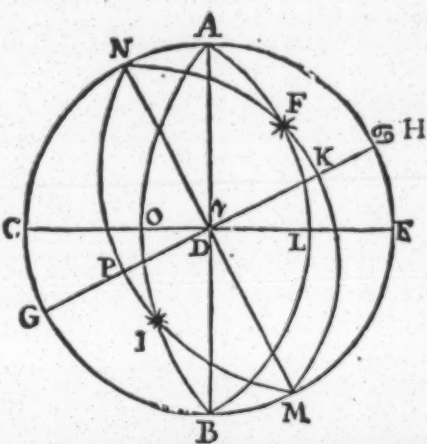
C H A P. XII.

Of the Longitude and Latitude of the fixed Starres.

THe Starres of the eight Heaven, are called fixed Starres, because that they (unlike to the Planets without motion) doe alwayes remaine fast and fixed in one forme and distance one from the other, and are alike carried about together one with the other by the Primum mobile, and are calculated according to Longitude and Latitude. There Longitude is a part of the Eclipticke, contained betweene two halfe Circles, passing both out of the Poles of the Eclipticke, the one through the Equinoctium of the Spring, or beginning of Aries, the other through the Starres themselves. Their Latitude is an arch of such a halfe Circle betweene the Eclipticke Line and the Starres. This is twofold, Northerly and Southerly: Northerly which standeth Northwards from the Eclipticke, and Southerly which standeth to the Southwards from it.

A declaration.

Let GDH be the Eclipticke Line, N the North and M the South Poles of the same: F a certaine Starre. Let there be two halfe Circles drawne out of the foresaid Poles, the one NDM through the Equinoctium of the Spring at D, the other through the Starre F, cutting the Eclipticke in K. The part of the Eclipticke DK is the Longitude of that Starre, and the arch or part of the same halfe Circle KF his Latitude Northwards, because that he standeth to the Northwards of the Ecliptick, and PI the Latitude of the Starre at I, because that he standeth to the Southwards of the Eclipticke.



C H A P. XIII.

Of the right Ascension and Declination of the fixed Starres.

THe right ascension of the Starres, is a part of the Equinoctiall, contained betweene two halfe Circles, passing both out of the Poles of the World, the one through the Equinoctium of the Spring, the other through the Starres themselves. Their Declination an arch of such a halfe Circle between the Equinoctiall and the same Starre, which is also of two sorts, Northerly which stand by North the Line, and Southerly which stand to the Southwards of it.

A declaration.

In the former Figure let CDE be the Equinoctiall Line, A the North, and B the South Pole of the World, F a certaine Starre: drawne out of the foresaid Poles two halfe Circles, the one ADB through the Equinoctium or beginning of Aries, the other through F the Starre, which cutteth the Equinoctiall in L. The part of the Equinoctiall LD is the right ascension of such a Starre, and the arch or part of the same Circle LF, his declination Northward, or OI of the Starre at I Southwards.

C H A P. XIV.

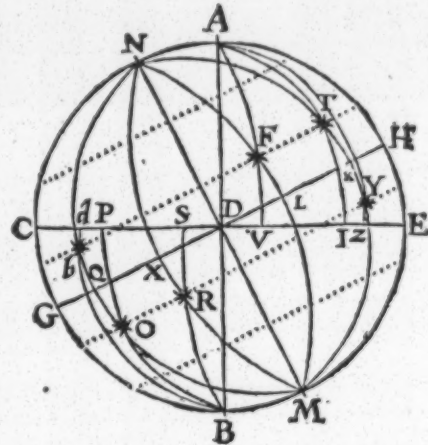
Of the Mutation or change of the Declination of the fixed Starres.

Like as the Starrie Heaven is carried about in our sight every twenty and foure houres, by the Primum mobile, upon the Axeltrees Points or Poles of the World, from East to the West, even so it is carried about once in 25400 yeeres, upon the Poles of the Eclipticke, contrarywise from West

to East, like as the Sunne once in the yeere. Thereby the Longitude of the Starres doth alter every hundred yeeres one Degree 25 Minutes, or every twenty yeeres 17 Minutes; but their Latitude, that is the distance from the Eclipticke, remaineth unchangeable alwayes the same. By the foresaid alteration of the Longitude, the declination also altereth in proceffe of time, of the one more and also swifter then of another. Some deminish and some encrease. Some having Northerly declination, come to have Southerly declination; and some having Southerly declination, come contrarywise to have Northerly.

A declaration.

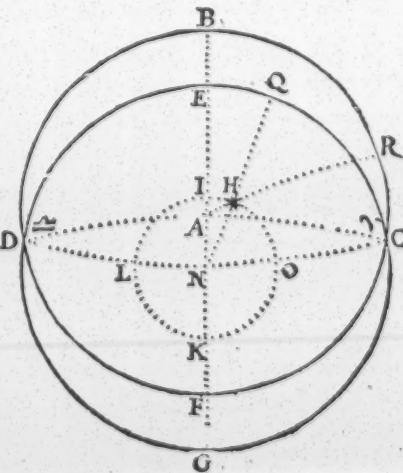
Let CDE be the Equinoctiall, A the North, and B the South Pole of the World, GDH the Eclipticke Line, NM the Poles of the same, G the beginning of Capricornus, D of Aries, and H the end of Gemini or beginning of Cancer. Let (as here before) the Starre at F his Longitude be in the Eclipticke at L, his Latitude to the Northwards of it LF, his Northerne declination is then VF. If that foresaid Starre after many yeeres doe alter in Longitude from F into T, paralell with DH, his Latitude remaines KT, even to the former FL, but his declination IT is greater then VF the first, because being paralell with DH he is declined more from the Equinoctiall Line. The Starre at O, whose Longitude in the Eclipticke is at Q, and his Latitude QO hath Southerly declination PO, but altering in Longitude from O into R paralell with QX, his Latitude remaineth XR even to QO, but his Southerly declination RS is lesse then OP, because that being in the paralell with GD, he is come neerer to the Equinoctiall. If the same Starre come to alter in length into Y, his declination shall be YZ to the Northwards of the Line. This hath beene said of the six first Signes ♈ ♉ ♊ ♋ ♌ ♍.



In the same manner it is also on the contrary side in the other six Signes ♎ ♏ ♐ ♑ ♒ ♓ and thus: In the same figure let H be the beginning of Cancer, D Libra, and G the end of Sagittarius. If a Starre at T having Northerly declination TI, doe alter in Longitude into F, his declination FV is lesse then TI, because he is come neerer the Equinoctiall, but if the same doe alter in Longitude unto b, his declination that was first Northerly, shall then be Southerly from b unto d.

By the foresaid motion of the eight Heaven, is the declination of the North Starre also altered, which doth now every yeere waxe greater, that is, it declineth the longer the more from the Equinoctiall, and commeth neerer the Pole, the which shal continue to the yeere of our Lord 2091, then he shal be at the neereft of the Pole, & no more then 26 Minutes & a halfe distant from it, & after that time againe by little and little decline from it, so that 12700 yeeres after that, he shall stand from the Pole 47 Degrees 56 Minutes. How this is done, may plainly appeare by this Figure.

Let A the North Pole of the World be in the midst of the Equinoctiall BD FC: N the Pole of the Eclipticke, in the midst of the Eclipticke EDGC: H the North Starre, his Latitude from the Eclipticke is QH 66 Degrees 2 Minutes, and his distance from the Pole of the Zodiacke NH 23 Degr. 58 Minutes, which alwayes remaines and continues one and the same,



b 2

even

even as the Latitude and distance of all the fixed Starres from the Pole of the Zodiacke, as hath beene before said, his Longitude from the Equinoctium of the Spring or beginning of Aries for the yeere 1635 is C Q 83 Degrees 24 Minutes.

Let there be a Circle drawne out of N the Pole of the Eclipticke, as I L K O H, whose halfe Diameter is N H 23 Degrees 58 Minutes, even to the distance of the North Starre from the Pole of the Zodiacke, within the same is the Pole of the World A included, as being lesse distant from the Pole of the Zodiacke then the North Starre. Vpon such a Circle doth the North Starre keep his course about the Pole of the Zodiacke (as all the fixed Starres doe) in 25400 yeeres, his distance from the Pole of the World is for the yeere 1625 A H 2 Degrees 42 Minutes, and shall be come in the yeere of our Lord 2091 by the foresaid motion from H into I at the neereft to A the Pole of the World, and shall then stand from it no more then 26½ Minutes. Proceeding from I alongft L into K, he shall then be distance from the Pole of the World A K 47 Degrees 56 Minutes.

Therefore seeing that the Starres doe not alwayes keepe one kind of declination: we have for the benefit of Seafaring-men prepared these two Tables following. The first sheweth their declination for the yeere 1645, And the second for the yeere 1655. Besides the declination, there is also added thereunto the complement of the declination, that is, how farre they stand distant from the Pole.

By these Tables men may finde the Declinations of the same Starres, in all other yeeres falling betwixt these, if they proportion the difference of the Declination according to the difference of the tyme.

1 Example.

I desire to knowe the Declination of the Lyons Tayle in the yeere 1650. I finde in the table for the yeere 1645, 16 Degrees 33 Minutes, and for the yeere 1655, 16 Degrees 30 Minutes, the numbres being devided at halfe, according as the yeeres, I finde 16 Degrees 31½ Minutes, decreasing declination.

2 Example.

I desire to know the Declination of Aldebaran the Bulles eye in the yeere 1650. I finde in the table for the yeere 1645, 15 Degrees 48 Minutes, for the yeere 1655, 15 Degrees 50 Minutes, the numbers being devided at halfe as the yeeres, I finde 15 Degrees 49 Minutes encreasing declination.

C H A P. XV.

Of the Horizon and Zenith.

THe Horizon or Sight-ender (so called, because our sight doth end at it) is a great Circle, deviding the Spheare into two equall parts, where of wee see the one above, the other is suncken under it out of our sight.

Zenith is the point of the Heaven right over our heads, every where alike distant from the Horizon, and is also called the Pole of the Horizon.

A Table of Declination of the most notable fixed Starres, together with their distance from the Pole.

In the yeeres, 1645, and 1655.

These here following standing all to the Southwards of the Equinoctiall Line have Southerly Declination.

Anno 1645.		Anno 1655.	
Southerly declination.	Distance from the S. Pole.	Southerly declination.	Distance from the S. Pole.
deg. min.	deg. min.	deg. min.	deg. min.
The Northernmost in the Whales Tayle	10 46 79 14	10 43 79 17	
The Southernmost in the Whales Tayle	19 57 70 3	19 54 70 6	
The left Foot of Orion. <i>Regel.</i>	8 39 81 21	8 38 81 22	
The first of the three in the Girdle of Orion	0 36 89 24	0 36 89 24	
The second in the Girdle	1 27 88 33	1 27 88 33	
The third	2 10 87 50	2 10 87 50	
The great Dogge. <i>Syrus.</i>	16 13 73 47	16 13 73 47	
The Hart of the Water-Serpent Hydra	7 8 82 52	7 10 82 50	
The Virgines Spicke. <i>Spica Virginis.</i>	9 15 80 45	9 18 80 42	
The South Ballance	14 30 75 30	14 33 75 27	
The North Ballance	8 1 81 59	8 4 81 56	
The Northernmost and foremost in the left Hand of the Serpent-bearer <i>Ophiuchus</i>	2 46 87 14	2 48 87 12	
The left Knee of <i>Ophiuchus</i>	9 46 80 14	9 48 80 12	
The right Knee of the Serpent-bearer	15 12 74 48	15 13 74 47	
The Hart of the Scorpion, <i>Antares.</i>	25 33 74 27	25 35 74 25	
The Northernmost of the two in the Hornes of Capricornus.	13 33 76 27	13 32 76 28	
The Southernmost of the same two	15 50 74 10	15 49 74 11	
The foremost or Westernmost of the two Lights in the Tayle of Capricornus	18 10 71 50	18 8 71 52	
The second or Easternmost	17 39 72 21	17 37 72 23	
The left Shoulder of Aquarius	7 48 82 56	7 2 82 58	
The right Shoulder of Aquarius	2 0 88 0	1 57 88 3	
The outermost in the Streame of Aquarius called <i>Fomahant</i>	31 25 58 35	31 22 58 38	

These following standing all by North the Equinoctiall Line have Northerly Declination.

Anno 1645.		Anno 1655.	
Northerly declination.	Distance from the N. Pole.	Northerly declination.	Distance from the N. Pole.
deg. min.	deg. min.	deg. min.	deg. min.
The North Starre, <i>Ahrucuba</i>	87 25 2 35	87 28 2 32	
The middlemost or brightest of the Guardes	75 40 14 20	75 37 14 23	
The Breast of Cassiopea, <i>Schedir</i>	54 37 35 23	54 40 35 20	
The Hip of Cassiopea	58 49 31 11	58 52 31 8	
The Knee of Cassiopea	58 22 31 38	58 25 31 35	
The brightest in the Chaire of Cassiopea	57 13 32 47	57 17 32 43	
The Head of Andromeda	27 9 62 51	27 12 62 48	
The Girdle of Andromeda	33 47 56 13	33 50 56 10	
The Southernmost Foot of Andromeda	40 36 49 24	40 39 49 21	
The brightest in the Head of the Ramme	21 46 68 14	21 49 68 11	
The brightest in the Mouth of the Whale, <i>Menkar</i>	2 40 87 20	2 42 87 18	
The brightest in the Head of Medusa	39 33 50 27	39 35 50 25	
The brightest in Perseus Side	48 31 41 29	28 33 41 27	
The Souther Eye of the Bull, <i>Aldebaran</i>	15 48 74 12	15 50 74 10	
The North Horne of the Bull	28 16 61 44	28 17 61 43	
The South Horne of the Bull	20 54 69 6	20 54 69 6	
The left Shoulder of Orion	5 59 84 1	6 0 84 0	
The right Shoulder of Orion	7 18 82 42	7 18 82 42	
Hircus the Goat upon the left Shoulder of the Waggener Erichthonius, called <i>Capella</i>	45 35 44 25	45 36 44 26	
The right Shoulder of Erichthonius	44 52 4 58	44 52 45 8	

Anno

Anno 1645.		Anno 1655.		
Northerly declination.	Distance from the N. Pole.	Northerly declination.	Distance from the N. Pole.	
deg. min.	deg. min.	deg. min.	deg. min.	
16 40	73 20	16 40	73 20	The brightest in the Feet of the Twinnes
32 36	7 24	32 35	57 25	The Head of the Northermost Twin Castor
28 50	61 10	28 49	61 11	The Head of the Southermost Twin Pollux
6 7	83 53	6 6	83 54	The little Dogge <i>Procyon</i> .
13 45	76 20	13 37	76 23	The Hart of the Lyon <i>Regulus, Basiliscus</i>
21 35	58 23	21 34	68 26	The middelmofte and brightest in the Necke of the Lyon
22 28	57 32	22 24	67 36	The brightest in the Backe of the Lyon
16 32	73 27	16 30	73 30	The Lyons Tayle
				The Northermost hinder Wheele of Charles Waine, or the Northermost of the Pointers called <i>Dubhe</i>
63 40	26 20	63 37	26 23	
				The Southermost hinder Wheele of Charles Waine, or the Southermost of the Pointers
58 17	31 43	58 14	31 46	
59 0	31 0	58 57	31 3	The Northermost Fore-wheele of the Waggon
55 41	34 19	55 37	34 22	The Southermost Fore-wheele of the Waggon
57 56	32 4	57 53	32 7	The next Horse to the waggon
56 49	33 11	56 46	33 14	The middlemofte horse
51 8	38 52	51 5	38 55	The outermost horse.
12 54	77 6	12 51	77 9	The Norther Winge of Virgo <i>Vindemiatrix</i>
5 22	84 38	5 19	84 41	The Girdle of Virgo
39 50	50 10	39 47	50 13	The left shoulde of Bootes
				The bright starre between the thighes of Bootes <i>Arcturus</i>
21 56	58 55	21 26	58 58	
27 57	62 3	27 55	62 5	The brightest in the norther Crowne
7 37	82 23	7 35	82 25	The brightest in the neck of the Serpent <i>Ophiuchus</i>
14 51	75 9	14 50	75 10	Hercules Head
12 52	77 8	12 51	77 9	The Serpent bearers Head
51 37	38 23	51 37	38 23	The brightest in the Dragons Head
38 30	51 30	38 30	51 30	<i>Lyra</i>
13 24	76 36	13 25	76 35	The Eagles tayle
8 0	82 0	8 18	59	The middlemofte and the brightest in the Eagle <i>Vultur</i>
39 9	50 51	39 11	50 49	The Swans breast
44 34	57 57	44 54	55	The Swans tayle
69 120	59	69 320	57	The Girdle of <i>Cepheus</i>
8 16	81 44	8 18	81 42	The starre in the mouth of the Horse <i>Pegasus</i>
26 10	73 50	26 13	73 47	The bright starr on the legge of Pegasus <i>Scheat</i>
13 19	76 41	13 21	76 39	The shaft of Pegasus <i>Marcab</i>
13 13	76 47	13 16	76 44	The outermost in the Wing of Pegasus

A declaration.

The Horizon is considered two manner of wayes, according to the true and visible Horizon. The true Horizon goeth right levell with the water every way from our sight, or through the center of the Spheare, deviding the same into two equall parts, is every where distant from the Zenith 90 degrees, the just fourth part of a Circle.

The Visible is the uttermost part of the earth or water, that we can see with our eyes, which doeth not extende farther from us then four or five leagues. When that our eye is even with the superficial part of the water, the true Horizon & the visible are then one, without any difference: but our eyes being elevated from it, the sight falleth over the roundnes of the Earth or Water al about lower then levell, and consequently the visible Horizon lower then the true. Although this doth amount to little in the use of Navigation, (when it is partly remedied by the refraction of the visible Horizon) we have notwithstanding for the satisfaction of the curious hereto added this little table, wherein it doeth appeare, how much the Visible Horizon is lower then the True, upon severall heights of feete.

The eye being elevated above the water.	The visible horizon is lower then the true.
foote.	minutes.
2	1
4	2
8	3
14	4
20	5
27	6
37	7
39	8
53	9
67	10
82	11
100	12
140	13
163	14
186	15

Example.

The sight being elevated above the Superficial part of the water 14 foote in the first columnne, right against it standeth 4 minutes, that the Visible Horizon is lower then the True: the sight being elevated 140 foote, the Visible Horizon is lower then the True 13 minutes.

CHAP. XVI.

Of the Meridian.

The Meridian is a great Circle passing through both the Poles of the World through the Zenith, crossing on both sides through the Equinoctiall, and right in the South and North through the Horizon.

The declaration.

The Meridian or Middayes Circle hath his name of *Meridies*, that is, Midday, because that the Sunne comming in the south to this Circle maketh Midday or High noone. All the Celestiall Lights ascending and comming to this Circle, are at their highest elevated from the Horizon, which passing through, they beginne againe to descend.

If men doe Travaille, or saile right northward or southward, they doe alwayes remaine under one and the same Meridian, but if they doe goe eastwards or westwards, they get continually alwayes an other Meridian.

CHAP. XVII.

Of the devision of the Earth according to Longitude and Latitude.

The places upon the Earth are devided and reckoned according to Longitude and Latitude.

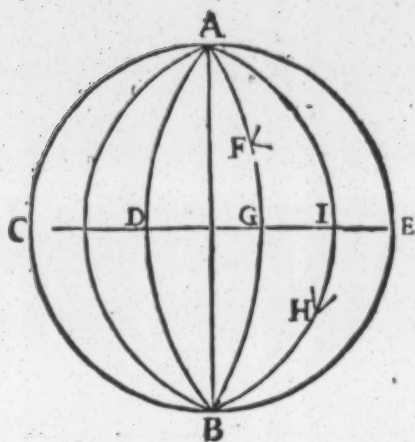
The Longitude of any place whatsoever is a part of the Equinoctiall Line (or any other paralell) containd betweene two Meridians, whereof the one passed through the beginning of Longitude, (over the *Canaries* Islands) and the other through the place it selfe.

The Latitude is the part of one Meridian betwixt the Equinoctiall Line and the place, which is of two manner of wayes, to wit northerly and Southerly.

A declaration.

Vpon the Earth (according to the similitude of the celestiall Spheare) is also imagined two Poles with a middle Line, to wit two points upon the Earth, right under the Poles of the World, common with the axeltree of the World, and a Line in the middest betweene these two points, right under the celestiall Equinoctiall Line. Along this middle Line men doe count the Longitude of lands, from west to east, beginning at a Meridian or South and North Line, passing over the Pike of *Teneriffe* (one of the *Canarie* Islands) to 360 degrees. The Latitude is counted from the Middle Line northwards and southwards, towards both the Poles to 90 degrees. This shall more evidently be apprehended by such an.

Example.



In this figure of the Earth let A be the North and B the South Pole, C D E the Middle Line, A D B the Meridian, passing out of both the poles, over the Pike of Teneriffe, as the beginning of Longitude F the Cape S. Vincent in Spaigne, over which let there be drawne the Meridian A F G B: the part of the Equinoctial D G between these two Meridians is the Longitude of the C. S. Vincent 23 degrees 40 minutes and the arch G F the part of the Meridian between the Line and the foresaid Cape is the Northerne Latitude 37 degrees, because that the foresaid Cape is farre distant from the Middle Line towards the north.

2 Example.

Let H be the Cape of Bona Esperance, the southermost point of Africa, and let the Meridian A I H B be drawne over it. The part of the Equinoctial D I is the Longitude of the foresaid Cape, and H I the part of the Meridian between the Line and the Cape, the southerne Latitude 34½ degrees, because the Cape lyeth so farre to the southwards of the Line. And so of all other Lands and places.

C H A P. XVIII.

Of the difference between the common flat Seacardes and the round or Terrestiall Globe.

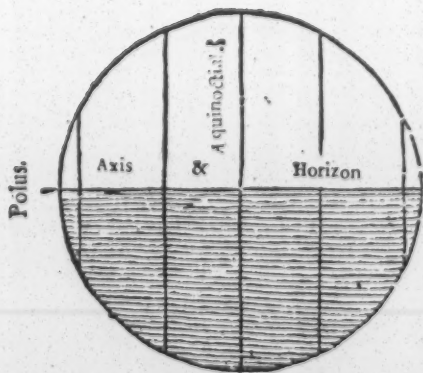
IN the common Seacardes the Seacoastes and points of Lands are drawne according to their courses & distances from the one to the other, as also according to their Latitudes: but because of the unlikenes which they have, (by their flat forme) with the roundnes of the Earth, it is not possible, to place them al so exactly according to their right Longitude. All Meridians or Lines from south & north upon the terrestial Globe how farsoever they stand upon the Middle Line, one from the other extending northwards or southwards, come at the end of 90 degrees of the Line, together into one point; but upon the flat Seacardes, whether such Meridians do stand near or far one from the other, they never come neare one another, but remaine alwaies alike farre asunder. Likewise with all the points, except onely those of east and west.

C H A P. XIX.

Of the differences or formes of the Spheare.

THE Spheare is considered after three kindes. 1 in *Sphaera recta*, 2 *Parallela*, & 3 *Obliqua*, that is, Right, Parallel-wife, and Oblique Spheare.

A declaration.

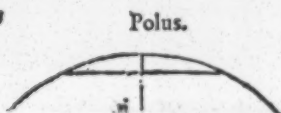


1 *Sphaera Recta*, or Right Spheare, is so called because that when the Poles of the world lie at the Horizon, and the Equinoctial is one with the Zenith, as is shewed in this Figure, all the Celestiall Lights, either Sunne, Moone, or

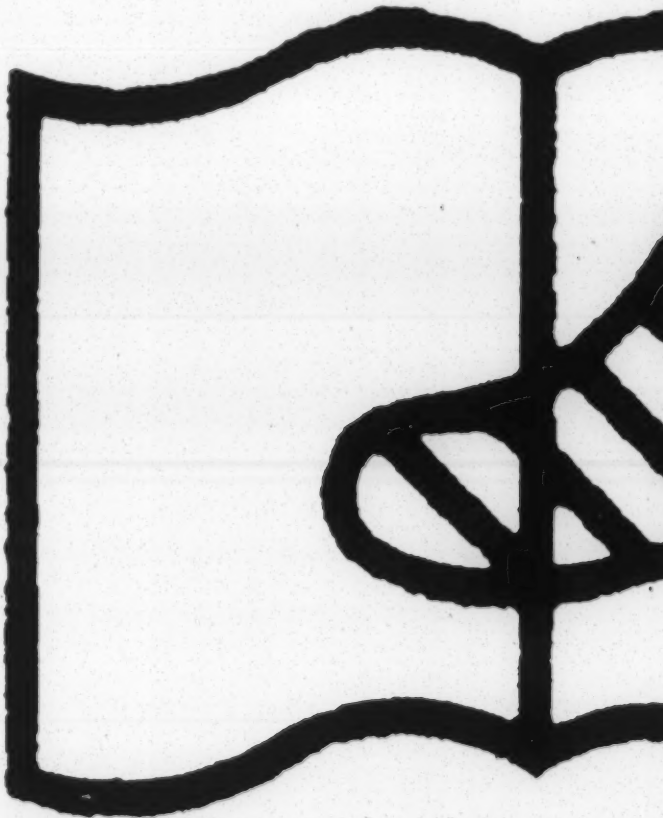
Starres (whether they stand neere unto, or far distant from the Equinoctiall or Pole) arise right up from the Horizon, and goe right downe under it. All the Starres that come up together, goe together one with another through the Meridian, and also together under. And in so much all the Circles, which the Sunne, Moone or Starres doe describe by their daily course about, are of the Horizon divided into equall parts. The foresaid Lights are also just twelve houres above and twelve houres under the Horizon: the day and night are alwayes in that place of one length without change.

This happens unto those that inhabite right under the Equinoctiall Line without any Latitude, as in S. Thome, some of the Molukas, and such like Lands, where neither of both the Poles are elevated above the Horizon.

2 *Sphaera Parallela*, or equally distant Spheare, is so called, because that when the Axeltree of the



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Spheare have the daies and nights unequall, sometyes long, & sometyes on the contrary short. How much the higher the one Pole is Elevated above the Horizon, so much the more is the unequallite of the dayes and nights, as also the rising and setting of the Starres is more unequall in regard the Circles which they describe in their course about are cut in more unequallite from the Horizon.

Example.

Let FDG be the Horizon, CDE the Equinoctiall, BDA

B D A the Axeltree of the World, not right up to the Zenith N, nor even with the Horizon F D G, but the one Pole elevated above the same, as from G to A, the other suncke under it from F to B. The Equinoctiall likewise crooked or Byaswise with all Parallels upon the Horizon. Let the Sunne be at the Tropicke of Cancer H Q M at midnight at the lowest under the Horizon at M: Seeing he goeth in 12 houres from midnight to midday from M to H, he goeth the halfe from M to Q in fixe houres, and therefore in lesse then fixe houres from M to O at the Horizon where he riseth, and in more then fixe houres from Q to H: the halfe day shall then be longer, and the halfe night shorter then fixe houres. To the contrarie, let the Sun be at the Tropicke of Capricornus at midnight at L he shall then goe from L to R in fixe houres and in more then fixe houres unto P to the Horizon where he riseth, and consequently in lesse then fixe houres from P to K to the midday, so that the halfe day is shorter, and the halfe night longer then fixe houres.

Goeth he aside from the middle Line of the Earth tenne, twentie, or more Degrees in Latitude Northwards the North Pole shall also be Elevated tenne, twentie, or more Degrees: The South Pole to the contrarie shall sinke so much under the Horizon, and the Equinoctiall Line shall be altered just so much Southward from the Zenith.

The contrarie happeneth, If a man remove off from the middle Line Southwards. All which appeareth more evidently by this Figure here to adjoynd.

Example.

Bring both the Poles to the Horizon without Elevation, the Equinoctiall Line commeth then right to the Zenith, and the little man shall stand upon the Globe of the Earth, right upon the middle Line of the Earth Without any Latitude. If we remove the little man upon the Globe of the Earth from the middle Line towards the North 10 Degrees, the Equinoctiall removeth 10 Degrees, Southward from the Zenith, the North Pole is elevated 10 Degrees above the Horizon, and the South Pole descendeth 10 Degrees under it.

Horizon.

the Latitu-

C H A P. X X I.

Of the Altitude of the Equinoctiall.

THe Complement of the Altitude of the Equinoctiall, is alwaies just to the Altitude of the Pole, and the Latitude of Lands.

A declaration.

Out of the former Chapter it hath appeared, that as much as one of both the Poles arriseth from the Horizon, the Equinoctiall Line is depressed just so much off from the Zenith towards the Horizon. The space then between the Equinoctiall and Zenith (which is the Complement of the Equinoctials Altitude to 90) is just to the Poles Altitude. To the contrarie, the space between the Zenith and the Pole (which is the Complement of the Pole Altitude to 90) is alwaies just to the Altitude of the Equinoctiall. Hence it followeth, If being upon any place of the Earth, you doe know the Elevation or height of the Pole above the Horizon, or the height of the Equinoctiall, & consequently the Complement of the height, then you know also the Latitude of that place, that is, how farre you are from the middle Line upon the Globe of the Earth, either Northwardes or Southwards.

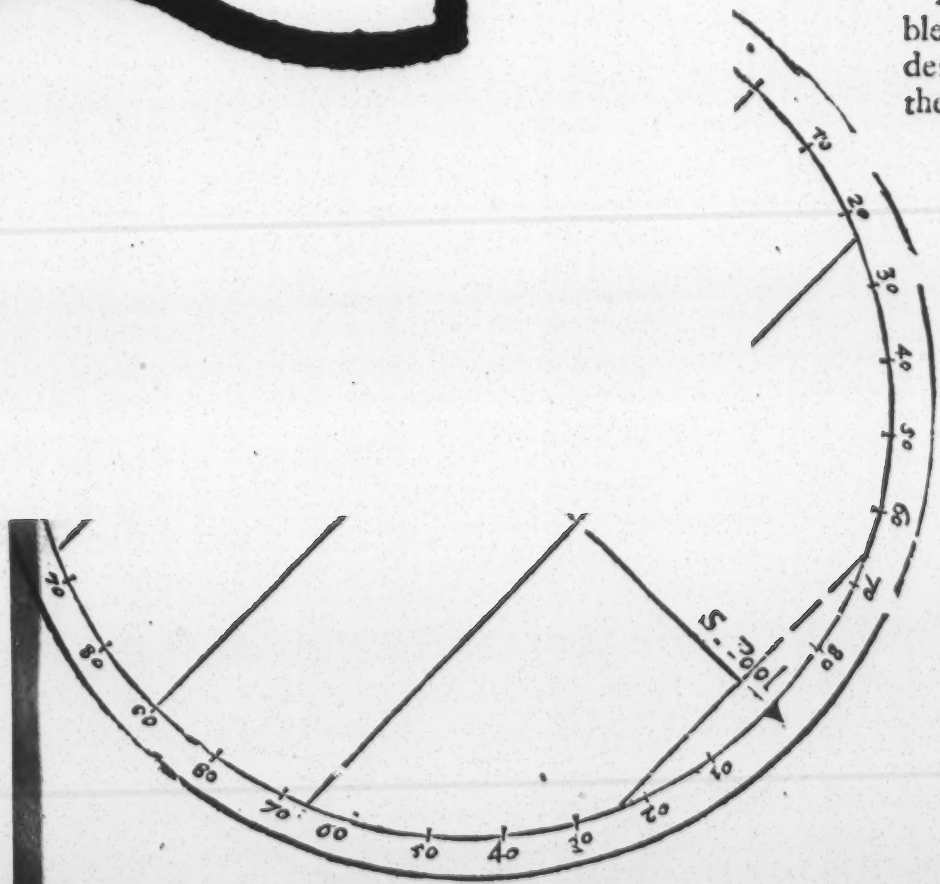
In so much as the Poles and Equinoctiall Line are invisible, and therefore it is impossible to observe their Altitudes from themselves, men must come to the knowledge thereof by other visible things, to wit by the Altitude or height of the Sunne, and of the Starres. Before that we proceed therein, we will describe the making and use of some Instruments needfull thereto.

C H A P. X X I I.

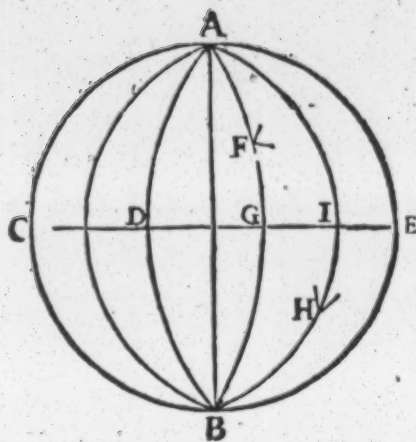
Of the making of the Crosse-Staffe and Astrolabie.

FOr to observe the Altitude or height of the Celestiall Lights above the Horizon, the Mathematicians have invented many kindes of instruments, whereof there are two the fittest and most necessarie above all the rest for to use at Sea; The Common Crosse-Staffe and the Astrolabie.

It is not everie mans worke to make and marke an Astrolabie for want of practice needfull thereunto, yet notwithstanding it is necessarie that a Pilote, who is to have the use of it, should know when it is well made: For the tryall hereof, you may see first with a paire of Compasses whether the Degrees be well divided. Secondly (hanging it to a Staffe or Corde, try with a small Plummet and Line, whether the Line going downward



Example.



In this figure of the Earth let A be the North and B the South Pole, C D E the Middle Line, A D B the Meridian, passing out of both the poles, over the Pike of Teneriffe, as the beginning of Longitude F the Cape S. Vincent in Spaigne, over which let there be drawne the Meridian A F G B: the part of the Equinoctial D G betweene these two Meridians is the Longitude of the C. S. Vincent 23 degrees 40 minutes and the arch G F the part of the Meridian betweene the Line and the foresaid Cape is the Northern Latitude 37 degrees, because that the foresaid Cape is farre distant from the Middle Line towards the north.

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C H A P. XVIII.

Of the difference between the common flat Seacardes and the round or Terrestiall Globe.

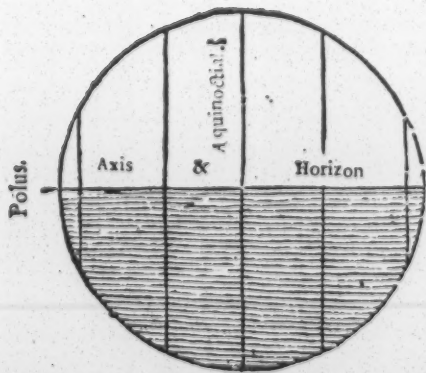
IN the common Seacardes the Seacoastes and points of Lands are drawne according to their courses & distances from the one to the other, as also according to their Latitudes: but because of the unlikenes which they have, (by their flat forme) with the roundnes of the Earth, it is not possible, to place them al so exactly according to their right Longitude. All Meridians or Lines from south & north upon the terrestial Globe how farfoever they stand upon the Middle Line, one from the other extending northwards or southwards, come at the end of 90 degrees of the Line, together into one point; but upon the flat Seacardes, whether such Meridians do stand near or far one from the other, they never come neare one another, but remaine alwaies alike farre asunder. Likewise with all the points, except onely those of east and west.

C H A P. XIX.

Of the differences or formes of the Spheare.

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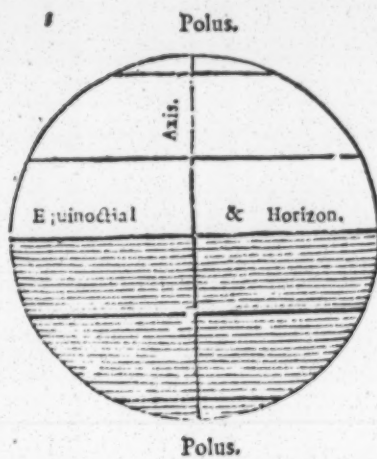
A declaration.



1 *Sphaera Recta*, or Right Spheare, is so called because that when the Poles of the world lie at the Horizon, and the Equinoctiall is one with the Zenith, as is shewed in this Figure, all the Celestiall Lights, either Sunne, Moone, or

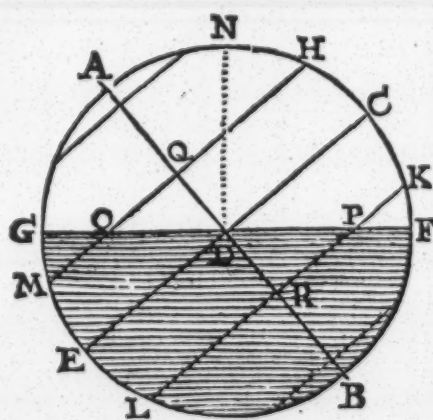
Starres (whether they stand neere unto, or far distant from the Equinoctiall or Pole) arise right up from the Horizon, and goe right downe under it. All the Starres that come up together, goe together one with another through the Meridian, and also together under. And in so much all the Circles, which the Sunne, Moone or Starres doe describe by their daily course about, are of the Horizon divided into equall parts. The foresaid Lights are also just twelve houres above and twelve houres under the Horizon: the day and night are alwayes in that place of one length without change.

This happens unto those that inhabite right under the Equinoctiall Line without any Latitude, as in S. Thome, some of the Molukas, and such like Lands, where neither of both the Poles are elevated above the Horizon.



2 *Sphaera Parallela*, or equally distant Spheare, is so called, because that when the Axeltree of the World standeth right up and downe, & the one Pole in the Zenith, the Equinoctiall lieth then even plaine with the Horizon, as is shewed in this Figure. At that place of the Terrestiall Globe where is such situation of the Spheare, all the Starres of the Firmament are by the daily motion caried about Parallelwise or equally distant with the Horizon. All that are above the Horizon, remaine continually above it without going under, and all those that are under it, remaine continually under it without rising. From whence it followeth (that where as the one halfe of the Eclipticke remaineth alwaies above the Horizon, and the other halfe under it) that the Sunne, being in that part of the Eclipticke which remaineth above the Horizon, also doth not Set nor goe under, but maketh one day of fixe moneths. On the contrary, being in that part under the Horizon, commeth not up, but contrarywise maketh also on night of fixe moneths.

3 *Sphaera Obliqua*, or crooked Spheare, is so called, because that neither the Axeltree of the World, nor the Equinoctiall doe neither lie flat downe, nor stand right up from the Horizon, but enclined sloping. Whence it is that all the Celestiall Lights doe not rise nor goe right up from the Horizon, not equally distant alongst by it, but arise up sloping, & so descend againe. Also that some Starres about the Pole Elevated, doe alwaies remaine above, and to the contrary, others about the hidden Pole do never rise, and some others doe make unequall & unlike rising and setting. Those that stand from the Equinoctiall towards the Pole Elevated, are more then 12 houres above the Horizon, and those that stand towards the hidden Pole, lesse then 12 houres above the Horizon. Likewise thus it is with the Sunne. From whence it followeth, that they that inhabite such a Spheare have the daies and nights unequall, sometymes long, & sometymes on the contrary short. How much the higher the one Pole is Elevated above the Horizon, so much the more is the unequallite of the dayes and nights, as also the rising and setting of the Starres is more unequall in regard the Circles which they describe in their course about are cut in more unequallite from the Horizon.



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Example.

Let FDG be the Horizon, CDE the Equinoctiall, BDA

B D A the Axeltree of the World, not right up to the Zenith N, nor even with the Horizon F D G, but the one Pole elevated above the same, as from G to A, the other funcke under it from F to B. The Equinoctiall likewise crooked or Byaswise with all Parallels upon the Horizon. Let the Sunne be at the Tropicke of Cancer H Q M at midnight at the lowest under the Horizon at M: Seeing he goeth in 12 houres from midnight to midday from M to H, he goeth the halfe from M to Q in fixe houres, and therfore in lesse then fixe houres from M to O at the Horizon where he riseth, and in more then fixe houres from Q to H: the halfe day shall then be longer, and the halfe night shorter then fixe houres. To the contrarie, let the Sun be at the Tropicke of Capricornus at midnight at L he shall then goe from L to R in fixe houres and in more then fixe houres unto P to the Horizon where he riseth, and consequently in lesse then fixe houres from P to K to the midday, so that the halfe day is shorter, and the halfe night longer then fixe houres.

C H A P. X X.

Of the Altitude or height of the Poles above the Horizon.

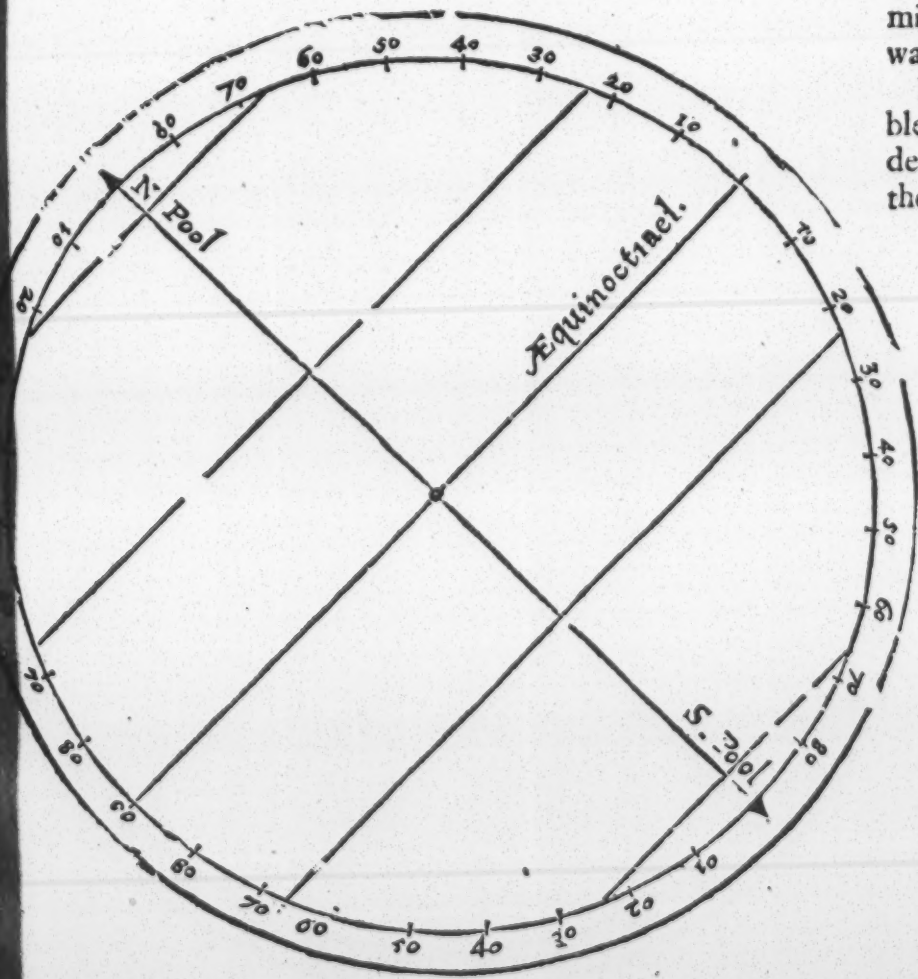
THe Altitude of the Pole, is alwaies even to the Latitude of the Lands.

A declaration.

By the Altitude of the Pole (which by many is called the height of Lands) is understood the Elevation of the Pole above the Horizon, that is, how many Degrees there is betweene the Horizon and the Pole. In the right Spheare the Poles lie without any Elevation in the Horizon. In the Parallel Spheare it is Elevated from the Horizon at the highest ninctie Degrees. In the Oblique or Byas-wise Spheare, the Elevation is different from one, tenne, twentie, fortie, fiftie Degrees more or lesse.

A man being upon the Globe of the Earth right under the Equinoctiall Line, hath both the Poles, the one in the North, the other in the South, at the Horizon without any Elevation, and then he standeth also right upon the middle Line of the Globe of the Earth without any Latitude.

If he remove from the middle Line towards the North or South, the one Pole shall then rise up out of the Horizon, and the other sinke under the same.



Goeth he aside from the middle Line of the Earth tenne, twentie, or more Degrees in Latitude Northwards the North Pole shall also be Elevated tenne, twentie, or more Degrees: The South Pole to the contrarie shall sinke so much under the Horizon, and the Equinoctiall Line shall be altered just so much Southward from the Zenith.

The contrarie happeneth, If a man remove off from the middle Line Southwards. All which appeareth more evidently by this Figure here to adjoynd.

Example.

Bring both the Poles to the Horizon without Elevation, the Equinoctiall Line commeth then right to the Zenith, and the little man shall stand upon the Globe of the Earth, right upon the middle Line of the Earth Without any Latitude. If we remove the little man upon the Globe of the Earth from the middle Line towards the North 10 Degrees, the Equinoctiall removeth 10 Degrees, Southward from the Zenith, the North Pole is elevated 10 Degrees above the Horizon, and the South Pole descendeth 10 Degrees under it.

C H A P. X X I.

Of the Altitude of the Equinoctiall.

THe Complement of the Altitude of the Equinoctiall, is alwaies just to the Altitude of the Pole, and the Latitude of Lands.

A declaration.

Out of the former Chapter it hath appeared, that as much as one of both the Poles arriseth from the Horizon, the Equinoctiall Line is depressed just so much off from the Zenith towards the Horizon. The space then between the Equinoctiall and Zenith (which is the Complement of the Equinoctials Altitude to 90) is just to the Poles Altitude. To the contrarie, the space betweene the Zenith and the Pole (which is the Complement of the Pole Altitude to 90) is alwaies just to the Altitude of the Equinoctiall. Hence it followeth, If being upon any place of the Earth, you doe know the Elevation or height of the Pole above the Horizon, or the height of the Equinoctiall, & consequently the Complement of the height, then you know also the Latitude of that place, that is, how farre you are from the middle Line upon the Globe of the Earth, either Northwardes or Southwards.

In so much as the Poles and Equinoctiall Line are invisible, and therefore it is impossible to observe their Altitudes from themselves, men must come to the knowledge thereof by other visible things, to wit by the Altitude or height of the Sunne, and of the Starres. Before that we proceed therein, we will describe the making and use of some Instruments needfull thereto.

C H A P. X X I I.

Of the making of the Crosse-Staffe and Astrolabie.

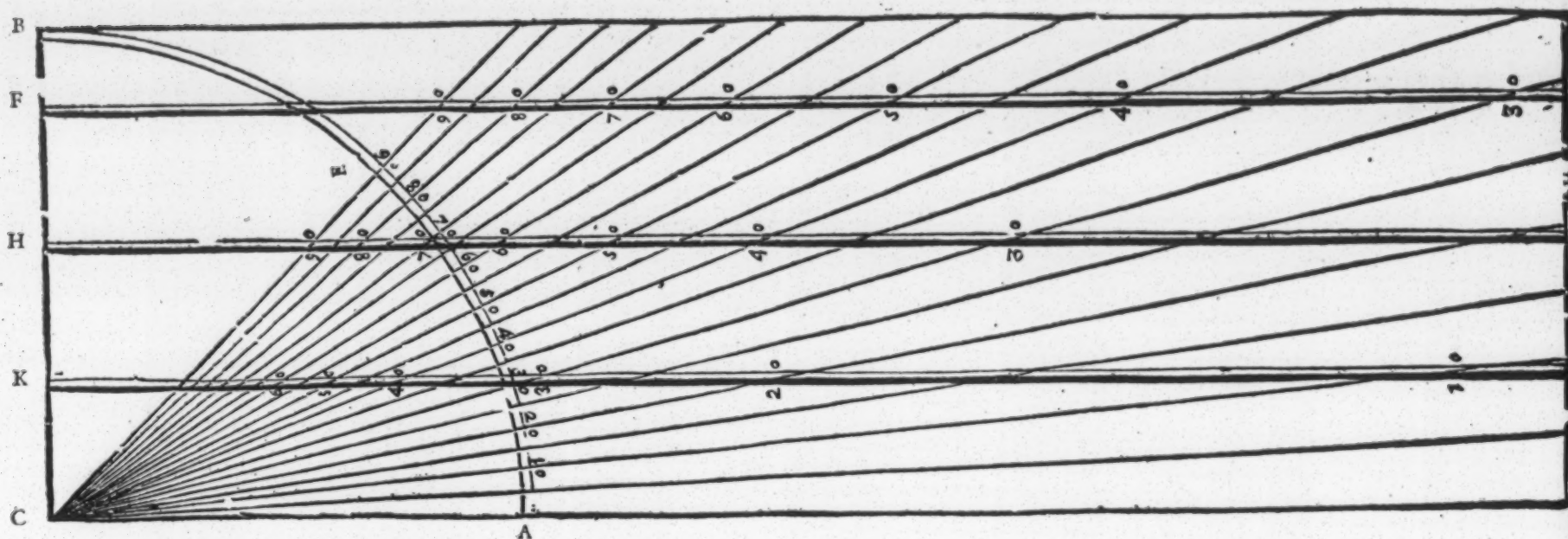
FOr to observe the Altitude or height of the Celestiall Lights above the Horizon, the Mathematicians have invented many kindes of instruments, whereof there are two the fittest and most necessarie above all the rest for to use at Sea; The Common Crosse-Staffe and the Astrolabie.

It is not everie mans worke to make and marke an Astrolabie for want of practice needfull thereunto, yet notwithstanding it is necessarie that a Pilote, who is to have the use of it, should know when it is well made: For the tryall hereof, you may see first with a paire of Compasses whether the Degrees be well divided. Secondly (hanging it to a Staffe or Corde, try with a small Plummert and Line, whether the Line going downward

from the Zenith or upper part through the Center, doe hang right with the Plummet Line, as well as the Alhidada, Labell, or Pointer be turned right over the one side as over the other. Thirdly, when as the Alhidada, or Pointer doeth stand with the point right upward, whether then both the holes (where the Sunne must shine through) doe stand un-

der and above on both sides of like Degrees distant from the Zenith or Horizon, all which being exactly well found, then it is wel made.

For to marke well a Crosse-Staffe, you shall make a plaine flat Borde of good dry Wood, fiftene or sixteene inches broad, and about foure foot long, paeft it well with



hood Paper, draw alongst the one side a right Line, as in this foregoing Figure CAD, out of the Point C draw a square Line upon AC as CB, and out of C the Arch AEB a right quadrant or fourth part of a Circle, devide that into two parts, the one half thereof, as a AE, devide into ninetie equall parts or Degrees thus: First, into three parts, and each of the same againe into three, these parts each into two, and each of the last parts into five, the Arch AE shall then be devided into ninetie parts. Then take a right Ruler, lay the one end upon the point or Center C, the other upon each point of the foresaid severall divisions, and draw small Lines out of C through each of the foresaid points or Degrees in the Quadrant, so long as they can stand upon the Borde, as is shewed in the same Figure. Then take with the paire of compasses just the halfe length of the Crosse, that you will marke the Staffe after, pricke it from the point C to B, as by example in F, and from D to G, draw these two points with a Line to one another, even into such parts as that Line is cut and devided by the foresaid Lines comming out of the Center of the Quadrant must your Staffe be marked. Whether the Crosse be long or short, the same manner is to be followed, as appeareth by the Lines HI and KL, which are drawne for Crosse, the halfe whereof is so long as CH or CK.

If that foresaid Quadrant by want of good skill or practice be not wel devided, or the Lines not well drawne, the Staves being marked thereafter, will also be faulty.

They may be marked more exactly by points equally devided, in manner as followeth; Prepare you a Staffe, and paeft it with good stiffe Paper (or it should be better layd with Copper) draw thereon a right Line so long as your Staffe, and take with a sharpe paire of Compasses the halfe length of the Crosse after which you desire to make your Staffe, prick it so often alongst the foresaid Line, as ther can stand upon the same, devide each of these lengths of the half Crosse into 10000 equall parts, then pricke upon the Staffe which you will marke from the Center end off even the halfe length of the Crosse, and make there a small thwart strike off from thence, pricke for each Degree so many of the same parts as the halfe length of the Crosse is devided, like as is marked in the Table here annexed for everie Degree.

Example..

For the first degree you shall marke off from that foresaid thwart strike 176, for the third degree 583, for the tenth degree 1918 of those parts, & so forth for all the rest.

If you cannot devide the halfe length of the crosse in-

to 10000, then devide the whole crosse so, and then take for each degree halfe so many points as the Table sheweth for it. And if you cannot yet doe that, then devide the halfe crosse into 1000, that is one 0 lesse, leave out in place thereof also the last Figures of the number of the parts in the Table, as for example, for the 15 degree in place of 30, 32 take 303, in place of 57 degree 2376. If in case your crosse be so litle that you cannot devide into lesse then 100, in such case leave out of the parts in the table, the two last Figures, and it shall satisfie your desire.

The Degree Table.

de. partes.	de. partes.	de. partes.	de. partes.	de. partes.	de. partes.
1 176	16 3270	31 7675	46 14751	61 28667	76 71445
2 355	17 3514	32 8040	47 15386	62 30108	77 77769
3 583	18 3764	33 8418	48 16051	63 31653	78 85144
4 724	19 4019	34 8807	49 16746	64 33315	79 93854
5 913	20 4281	35 9210	50 17475	65 35107	80 104301
6 1106	21 4550	36 9626	51 18239	66 37046	81 117062
7 1303	22 4826	37 10057	52 19042	67 39152	82 133007
8 1504	23 5108	38 10503	53 19887	68 41445	83 153499
9 1708	24 5399	39 10965	54 20777	69 43955	84 180811
10 1918	25 5697	40 11445	55 21716	70 46713	85 219038
11 2131	26 6003	41 11943	56 22708	71 49758	86 276362
12 2349	27 6318	42 12460	57 23759	72 53137	87 371885
13 2572	28 6643	43 12998	58 24874	73 56912	88 561810
14 2799	29 6976	44 13558	59 26059	74 61154	89 1135891
15 3032	30 7320	45 14142	60 27321	75 65958	90 endlesse.

C H A P. XXIII.

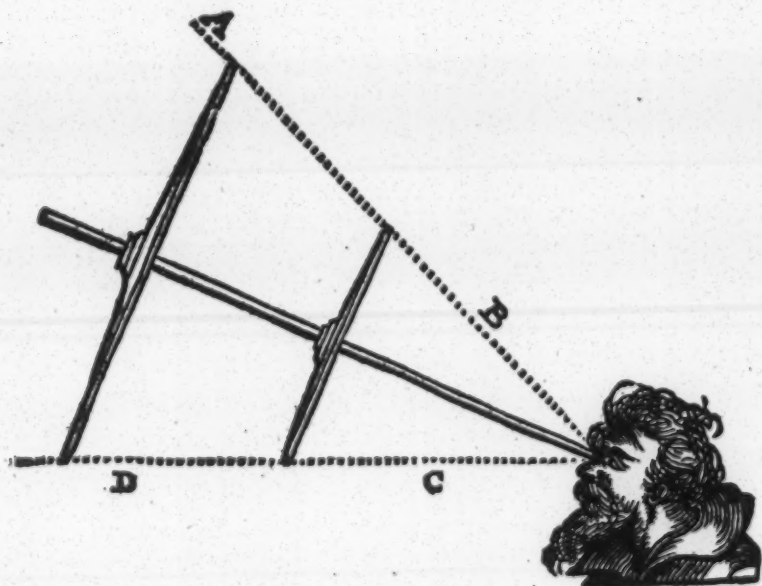
Of the use of the Astrolabie and Crosse-Staffe.

Hold the Astrolabie with the Finger by the uppermost ring, and let the Sunne shine through the hole in the uppermost Eare or little Table, right upon the hole in the undermost Eare, and then the outermost part of the Alhidada or Pointer sheweth on the outermost side the Altitude or height of the Sunne. In observing you must be verie careful, that the Astrolabie doe drive or hang loose without any let or hinderance, for the most part you may with the evill holding of it, cause it to point a quarter of a Degree amisse on the one side or other.

The Crosse-Staffe set the end thereof either to the inside or out-side of the eie, so that the end of the Staffe come to stand right with the Center of the Motion of the Sight, then move the Crosse so long off from you or towards you, holding it right up and downe & wincking with your other Eye till that the upper end come upon the middle or Center of the Sunne or Starre, and the lower end right with the Horizon.

Horizon. The Crosse then shall shew upon the side of the Staffe belonging thereto, the Degree of the Altitude of the Sunne or Starre.

Whether that the Sunne be much or little elevated from the Horizon, it causeth no errour in the use of the Astrolabie: But it is not so with the Crosse-staffe. The Sunne or Starres being high elevated from the Horizon, the Crosse commeth neerer to the eie, then when they are but a little elevated, and doe stand neere to the Horizon. Thereby the eie maketh (seeing now to the lower and then againe to the upper end of the Crosse) greater motion in looking up and downe, then when as the Sunne or Starre doe stand low. And in so much the Center of the sight by such looking up and downe, is also moved up and downe together with the end of the Staffe, a man seeth then smaller Angles then if it did remaine steadfast without mooving up and downe together with the end of the Staffe, in regard whereof the Crosse commeth neerer to the Eie then it should, and there is found too much Altitude. This being found of many by experience, they were therefore wont to cut of a peece of the end of their Staves, or to set the beginning of the Degrees one Degree and a halfe; or two Degrees neerer to the Center end of their Staves, but it is not the right meanes for to amend the foresaid errours. The best meanes of all (in my opinion) is, that upon each severall height which men will observe, they doe try with two Cresses set upon the like Degrees, how the Staffe must be set, that they may see the ends of the same two Cresses right one with the other; having found that, and then taking off one of the Cresses, and setting the Staffe againe in the same manner as before, all errours will be so prevented which by the lifting up or casting downe of the Eie, might any manner of way happen.



Example.

Desiring to observe the height of the Sunne or any Starre in the South I make my giffing as neere as I can, how high they shall stand (or take the height of them a little before they come to the South) which I take to be 50 degrees, I set therefore the two Cresses each upon their 50 degrees, and the end of the Staffe in the inner corner or in the hollow of the Eiebone on the out-side of the eie, and bow the Head forward or backward, or over the one side or other, till that I see the utmost ends of both the Cresses right one with the other, according as is shewed by these Lines A B and C D in the Figure here above. It is apparant enough by the same Figure that the sight beames over the ends of both Cresses shall then agree with the Lines which might be drawne over the ends of the Cresses to the point or Center at the end of the staffe, which doth agree with the center of the Quadrant, or the beginning of the equall points upon which the Staffe is marked; keeping in memorie such standing of the Staffe, I take of the one Crosse and set the Staffe againe in the foresaid manner to the eie, and I observe so without any errour of the eie.

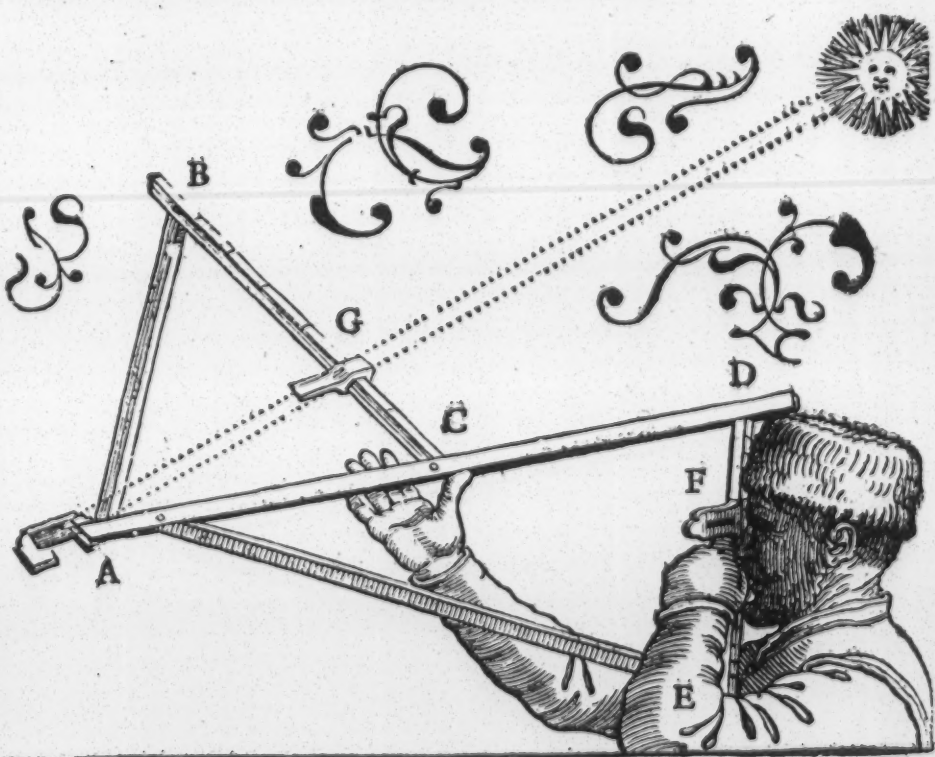
Men doe observe with the Crosse-staffe & also with the Astrolabie together, two different things. The height of the Sunne or of any Starre above the Horizon, and also

their complement of the height, that is, how farre they stand from the Zenith or uppermost point of Heaven over their Heads.

The side of the Astrolabie is commonly marked with double Siphers, the one beginneth from beneath upwards with 1, 10, 20, 30, &c. ending above under the Ring with 90. The other beginneth above under the Ring with 1, 10, 20, 30, &c. downwards ending with 90 at the under side of the halve Circle. When you observe the Sunne with the Astrolabie and doe use the first numbers, that sheweth how many degrees the Sunne is elevated above the Horizon, therefore the higher the Sunne is, the greater number you shall finde, if you use the other numbers, you shall not finde the height of the Sunne but the Complement of the height, that is, how farre the Sunne is from the Zenith or uppermost point of the Heavens right over your Head, and therefore the higher the Sunne is, you shall finde (contrarie to the former) the lesser number.

The Crosse-staffe is also marked with two kindes of numbers, the one hath towards the eie-end 90, and is numbred toward the utmost end by deminishing, as from 90 to 80, 70, 60, &c. The other beginneth by the eie-end and encreaseth contrariwise towards the utmost end, as from one to 10, 20, 30, &c. When you doe observe the Sunne or any Starre with the Crosse-staffe, & doe use the first numbers, you shall finde how high they stand above the Horizon, the higher that the Sunne or Starre stand; the neere the Crosse commeth to the eie, and thereby get the greater number. If you use the other numbers, you shall not finde how high any Coelestiall Light standeth (which you observe) above the Horizon, but how farre that it standeth from the Zenith, the lower the Lights are; the farther the Crosse commeth from the eie, and the greater is the number.

Although in taking the height of the Sunne with the Crosse-staffe men doe use Red or Blew Glasses for saving & preserving of the eies, yet is it notwithstanding a great let and verie troublesome for the sight, especially if it be high. Men shall then more easily and conveniently observe the height of the Sunne by his shaddow, with such a backe Staffe or double Triangle, as this figure here sheweth, where of the one A B C 60, and the other A D E containeth 30 Degrees: Setting the Fane G at a certaine number of Degrees, as the Altitude of the Sunne requireth, and looking through the Fane F to the under edge of A the Horizon, removing F so long up and downe, till that the shaddow of G fall upon the Fane A betweene the two Lines, the number of the Degrees then betweene G C and D F being added together, doe shew the Altitude of the Sunne above the Horizon, or the numbers betweene E F and G B together the distance of the Sunne from the Zenith.



Example.

I set the Fane G at 20 degrees from C towards B looking through

through the Sight-hole of the Fane F and remove that up and downe till that the shaddow of G fall at once betweene the two Lines upon the white Fanne A and the undermost edge of the foresaid Fane right upon the Horizon, and so I finde betweene D and F 16 Degrees, which added to the 20 of G C make together 36 Degrees for the Altitude or height of the Sunne above the Horizon, or the 40 from G to B and 14 from F to E together 54 give the Complement of the height, or the distance of the Sunne from the Zenith.

C H A P. XXIII.

How the Altitude or height of the Pole may be found by the Sunne.

FOR to finde the elevation of the Pole or Equinoctiall by the Sunne, you must first and before all things knowe whether you be to the northwardes or southwardes of the Sunne. Secondly, whether he be declined northward or southward from the Line. The first whether the Sunne be to the southward or northward of the Zenith may easily be perceived by the shaddowe, if you be any thing farre of from the Sunne, but not so easily, when it doth stand neare over your head. If you then set a Compasse before you, and do hold an Astrolabie over it or beside it, the one side right towards the North, and the other toward the South, and let the Sunne (being at the highest) shine through the holes of the eares, the Alhidada or Pointer shall shewe whether the Sunne be to the southwardes or the northwardes of the Zenith, and withall his Altitude above the Horizon, and distance from the Zenith. The second of the Sunnes declination is found by the eleventh chapter.

1 If so be the observation be made to the northwardes of the Sunne, that is, that the Sunne be to the southwardes of the Zenith, and if the Sunne have northerly declination substraet the declination from the observed Altitude, the remainder is the Altitude of the Equinoctiall in the south, that subtracted from 90 remaineth the elevation or height of the Pole, just with the latitude of the place of the earth where you are.

2 Or if you adde the Declination to the distance of the Sunne from the Zenith, you finde at the first the Complement of the Altitude of the Equinoctiall in the South, that is, the distance betweene the Equinoctiall and the Zenith, just to the Altitude of the Pole, or Latitude of the place where you are.

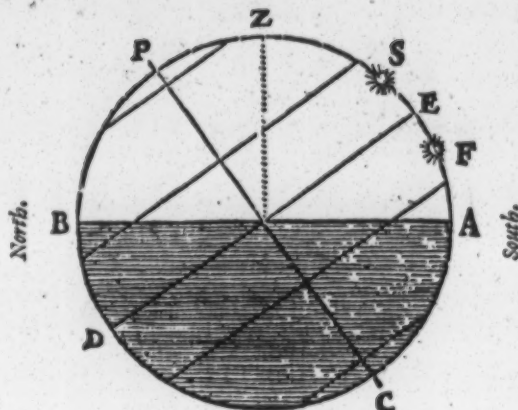
3 If it be South declination you must adde it to the observed Altitude: If that number be lesse then 90, it sheweth the Altitude of the Equinoctiall from the Horizon in the South. If it be more then 90, the Equinoctiall Line is then to the Northwardes of the Zenith, just so much as the number is more then 90, the South Pole so much above, and the North Pole to the contrarie so much under the Horizon. If it be just 90, the Equinoctiall Line standeth then just 90 degrees elevated right in the Zenith, and both the Poles lie right with the Horizon.

4 Or, if you substraet the South Declination from the found distance of the Sunne from the Zenith, there remaines the distance of the Equinoctiall from the Zenith, just to the North Poles Altitude. If the declination be more then the distance of the Sunne from the Zenith: in such case, substraet the distance of the Sunne from the declination, and that which remaineth, just so much is the Equinoctiall Line removed from the Zenith towards the North, the South Pole so much elevated, and the North Pole so much sunck under the Horizon. If the Declination and the distance of the Sunne from the Zenith be a like great, the Equinoctiall standeth then in the Zenith and both the Poles lie without elevation to the Horizon.

1 Example.

With the Altitude of the Sunne above the Horizon and north Declination.

Let in this figure P be the North, and C the South Pole,



DE the Equinoctiall, AB the Horizon; Let AS the Altitude of the Sunne be 55 degrees, SE the declination towards the North 12 degrees. If then you substraet SE 12, the declination, from AS 55 the Altitude, there remaineth EA 43 for the Altitude or height of the Equinoctiall. That being deducted from 90, as out of EC, there remaineth 47 for AC the depth of the South Pole under the Horizon, just to BP the height of the North Pole above the Horizon.

2 Example.

With the distance of the Sunne from the Zenith.

Let the distance of the Sunne from the Zenith (or the Complement of his Altitude) be ZS 35 degrees, adde thereunto the North declination SE 12 degrees, which maketh 47 for ZE the distance of the Equinoctiall from the Zenith, just to BP the height of the North Pole.

3 Example.

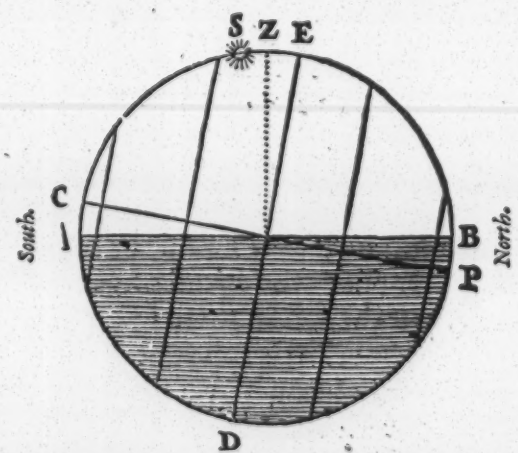
With South Declination.

In the former figure let AF be the Altitude of the Sun above the Horizon 28 degrees, the South declination EF 12 degrees. If the declination EF 12 be added to AF 28 the Altitude of the Sunne, you shall gette for EA the height of the Equinoctiall 40 degrees, which being deducted from AZ 90, there remaineth ZE 50 degrees, for the distance of the Equinoctiall from the Zenith, just to BP the Altitude of the North Pole.

4 Example.

In the former figure let ZF be the distance of the Sun from the Zenith 62 degrees, if you deduct from it EF 12 the South declination, there remaineth ZE 50 the distance of the Equinoctiall from the Zenith, just (as before) to BP the Altitude of the Pole, or the Latitude of the place where you are.

5 Example.



In this figure here adjoining let the Altitude of the Sunne in the South be AS 82 degr. and the South declination ES 20 degrees, if then you adde ES 20, to AS 82, it maketh for EA 102 degrees: deducting from it AZ 90, there remaineth 12 degrees for ZE the distance of the Equinoctiall towards the North. The North Pole P is then so much under, and C the South Pole so much above the Horizon.

6 Example.

Let the distance of the Sunne from the Zenith be ZS 8 degrees, the declination ES 20 degrees, more then the distance

distance betweene the Zenith and the Sunne. Deduct therefore Z S 8 degrees, from SE 20 the Declination, there remaineth for E Z 12 degrees, that the Equinoctial standeth to the northwards of the Zenith as before.

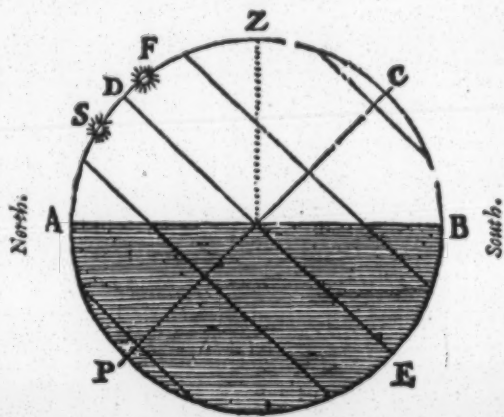
If the Declination and the distance of the Sunne where both alike eight degrees, as from S to Z, there should then (as appeareth by this figure) be no difference betweene the Zenith and the Line, and consequently, both the Poles should be without any elevation.

If the observation should be made to the southwards of the Sunne, that is, that the Sunne stand to the northwards from the Zenith, you shall doe even as is shewed before, as if the Sunne did stand to the southwards from the Zenith, onely with this difference, that in the place that here before hath beene said of the North Pole, must be understood here of the South Pole, and the Latitude which was then found to the Northwards of the Line, now on the contrarie commeth to be to the Southwardes of the Line.

1 Example.

With South Declination.

In this figure let C be the South & P the North Pole, DE the Equinoctial, BA the Horizon, Z the Zenith. Let AF be the Altitude of the Sunne above the Horizon in the North 58 degrees, DF South declination 8 degrees. If you deduct the declination DF 8, from FA the Altitude, there remaineth DA 50 degrees, the Altitude or height of the Equinoctial above the Horizon in the North, that being deducted out of DP 90 remaineth AP 40 degrees for the depth of the North Pole under the Horizon, just to CB the Altitude of the South Pole above the Horizon in the South.



2 Example.

With the Complement of the Altitude of the Sunne.

In the former figure let ZF be the Complement of the Sunnes Altitude 32 degrees, adde thereto DF the South declination 8, making together 40 for DZ the Complement of the height, or Altitude of the Equinoctial, just to CB the Altitude of the South Pole.

1 Example.

With North Declination.

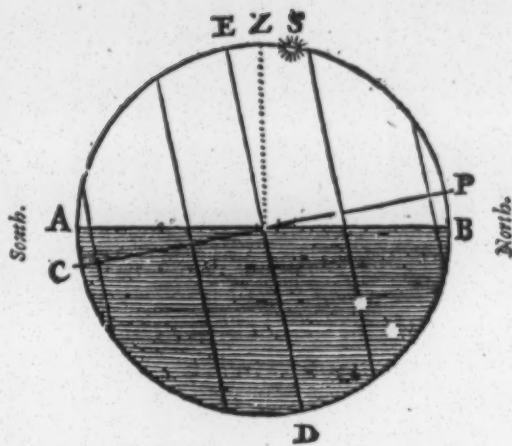
Let SA be the Altitude of the Sunne in the North 39 degrees, SD the North declination 14 degrees. If you adde the declination DS 14, to AS 39 the Altitude of the Sunne, you shall get for DA the Altitude of the Equinoctial 53 degrees, which being deducted from AZ 90, there remaineth for DZ the Complement of the Altitude of the Equinoctial, just to CB the Altitude of the South Pole above the Horizon, 37 degrees.

2 Example.

Let ZS be the Complement of the Sunnes Altitude 51 degrees, deduct from it DS the North declination 14 degrees, there remaineth for DZ the distance of the Equinoctial from the Zenith 37 degrees, just as before to the Latitude of the place where you observe.

3 Example.

Let the Altitude of the Sunne in the North be BS 82 the North declination ES 21 degr. If you adde the Altitude SB 82 to the declination SE 21 degr. there cometh for BE 103 degrees, the distance of the Equinoctial from the Horizon in the North, BZ 90 being deducted from it, remaineth for ZE the distance of the Equinoctial from the Zenith towards the South 13 degrees, just to BP the Altitude of the North Pole, above the Horizon.



4 Example.

Let the Complement of the Sunnes Altitude be AZ 8 degrees, the North declination ES 21 degrees, being more then the distance of the Sunne from the Zenith. Deduct therefore SZ 8 the Complement of the Altitude from SE 21 the declination, there remaineth 13 for ZE the distance of the Equinoctial from the Zenith, as before.

When as you sayle so farre northwards or southwards, that the Sunne goeth not downe, as they finde that saile about the North-Cape, and to Spitsberghen, or Greenland, and that you would observe the Altitude by the Sunne, also when he is in the north at the lowest.

I, There must be added unto the Altitude of the Sunne taken above the Horizon, the Complement of the Sunnes Declination, (that is the distance betweene the Sunne and the Pole) that number sheweth the Altitude of the Pole.

II, Or els the observed Altitude must be deducted from the Declination, that which remaineth is the depression or depth of the Equinoctial under the Horizon, in the North, just to the Altitude of the same in the South, the Complement thereof is the Altitude or height of the Pole.

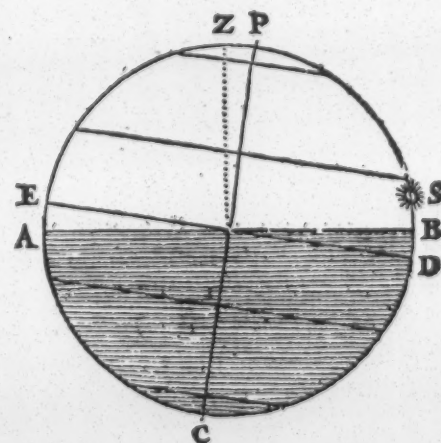
III, If you take the Complement of the Sunnes Altitude, and deduct from it the Complement of the Sunnes declination, there remaineth the distance of the Pole from the Zenith, or the Altitude of the Equinoctial in the South, the Complement thereof is the Altitude or height of the Pole.

IV, Or els, if you adde the declination to the Complement of the Altitude, and you deduct 90 out of that number added together, there remaineth the depth of the Equinoctial in the North under the Horizon: that being deducted out of 90, there remaineth the Altitude of the Pole.

1 Example.

Let P be the North and C the South Pole, ED the Equinoctial S the Sunne; DS the arch of the Sunnes Declination 18 degrees.

Let BS be the observed Altitude of the Sunne 8 degrees, and SP the Complement of the declination 72. I adde BS 8 the Altitude of the Sunne, to SP 72 the Complement, it maketh 80 for BP the Altitude of the Pole.



2 Example.

I deduct the observed Altitude BS 8 degrees, from SD 18 the declination of the Sunne, there remaineth DB 10 the

the depth of the Equinoctiall in the North under the Horizon, just to A E the Altitude of the Equinoctiall in the South above the Horizon, the which being deducted from D P 90, there remaineth P B 80 degrees for the Altitude of the Pole.

3 Example.

Let Z S be the distance of the Sunne from the Zenith 82 degrees, I deduct from it S P 72 the Complement of the declination, there remaineth Z P 10 the distance of the Pole from the Zenith, that being deducted from Z B 90, there remaineth for P B 80 degrees the Altitude of the Pole.

4 Example.

Or els I adde the declination S D 18 to the knowne distance of the Sunne from the Zenith Z S 82, maketh 100 degrees for Z D, Z B 90 being deducted from it, there remaineth for B D the depth of the Equinoctiall in the North under the Horizon 10 degrees, that being deducted from D P 90, there remaineth P B 80 for the Altitude of the Pole.

C H A P. X X V.

Of the difference and Equation of declination in diuers places of the Earth.

THese Tables of the Sunnes declination, are calculated for the Meridian, or Longitude of the Earth of the Westend, or the Lands-end of England. They that are more easterly from thence have the declination lesse, so that when the Sunne declineth from the Line, and increaseth in declination, either northward or southward, as well betweene the 20 of March and the 22 of Iune, as betweene the 23 of September and the 22 of December: and more when the Sunne turneth againe towards the Line, whether it be also by north or by south the Line, as well betweene the 22 of December and the 20 of March, as betweene the 22 of Iune and the three and twentieth of September.

On the contrarie, they that are more westerly from thence have the increasing declination more, (that is, when as the Sunne declineth of from the Line, either by north, or by south the Line) & the decreasing declination lesse, (that is when the Sunne declineth againe towards the Line, whether it be also by north or by south the Line.) That happeneth because of the time thus: They that are more easterly, have the Sunne sooner in the south, or to their Meridian, & therefore the increasing declination lesse, and the decreasing declination more, to the contrarie, they that are more westerly get the Sunne later in their south, and therefore they have the increasing declination more, & the decreasing declination lesse.

1 Example.

Of those that are more easterly with increasing declination.

ON the 25 of March, in the second yeare after the leape yeare, I desire to knowe the declination of the Sunne at noone, at Bantam in the East-Indies. First I looke upon a Globe, or in any other table, how much Bantam lyeth more easterly then the Lands end of England, and finde about 120 degrees, (we doe nor esteeme here one degree or two, because that such difference doth amount to little in this practise) Seing then, that the Sunne, for his course about the haven or the whole Earth, which is 360 degrees, hath need of 24 houres, I would know how much time he needeth to runne about 120 degrees, and say thus 360 degrees require 24 houres: what time will 120 have? facit 8 houres. Whereby I finde, that the Sunne commeth 8 houres sooner to the south at Bantam then at the Lands end of England, that is: that the Sunne standeth south at Bantam

when at the Lands-end of England it is foure houres after midnight. Afterwards I seeke in these tables the declination of the Sunne on the foresaid 25 of March, and finde one degree 57 minutes, and (out of the declination of the day following, 2 degrees 21 minutes) that the declination of the Sunne at that time in 24 houres encreaseth 24 minutes, I say therefore: In 24 houres time the declination encreaseth 24 minutes, how much then in 8 houres? facit 8 minutes. Thence it appeareth, that whiles the Sunne runneth from the Meridian over Bantam unto the Meridian of the Lands-end of England, and the declination 8 minutes encreaseth, that the declination at Bantam is 8 minutes lesse, then these tables doe shewe. The Sunnes declination then at Bantam on that day is no more then one degree and 49 minutes by north the Line.

2 Example.

With decreasing declination.

ON the 16 of September of the same yeare I desire to knowe the declination of the Sunne, (at noone) at Bantam, which I finde to be for that day in these tables for the Longitude of the Lands-end of England 2 degrees 40 minutes, and (out of the declination of the day following 2 degrees 16 minutes) that at that time of the yeare it doth decrease everie day about 24 minutes. Seeing then the Sunne (as hath beene said in the first example) commeth eight houres sooner to the south at Bantam, then at the Lands-end of England, I say: In 24 houres the declination decreases 24 minutes. How much in eight houres? facit 8 minutes; thence it appeareth that while the Sunne runneth from the Meridian of Bantam, unto the Meridian of the Lands-end of England the declination decreases 8 minutes, and therefore at Bantam it is 8 minutes more, then these tables doe shewe. The declination of the Sunne on that day at Bantam is then 2 degrees 48 minutes.

N O T E.

Hence it followeth that one and the same Pilote (sayling eastwards to the Indies) comming at two such severall times before the strait of Sunda, and observing the Altitude of of the Pole of one same point of land by the Sunne, useth these tables of declination with out such regard: he should, although observing well, thereby, (the one time taking 8 minutes too much declination, & the other 8 minutes too little) differ 16 minutes in the finding of his Altitude, wherefore in farre voyages men must be careful of such things.

3 Example.

Of those that are more westerly with increasing declination.

A Shippe comming on the 9 of October in the third yeare after the Leape yeare, into the great South Sea, thwart of the coast of Peru, the Pilot desireth to know the declination there at noone, he findeth by a Globe, or some other table, that that Coast lieth at least 80 degrees more westerly then the Lands-end of England. The Sunne then must runne from the south over the Lands-end of England, unto the south of the foresaid coast of Peru, at least 80 degrees, whereto he must have about 5 houres & a halfe, so that when the Sunne standeth there in the south, it is at the Lands-end of England five houres and a halfe after noone. He findeth in these tables the declination of that daj 6 degrees 13 minutes by south the Line, and (out of that of the day following 6 degrees 36 minutes) that at that time in 24 houres the declination increaseth 23 minutes, therefore he shall say: in 24 houres the declination increaseth 23 minutes. How much in five houres and an halfe? facit at least five minutes, and from thence he shall finde, that while the Sunne runneth from the Meridian of the Lands-end of England unto that of the coast of Peru, the declination encreaseth at least 5 minutes, & therefore the declination on that

that day is 5 minutes more there, then the tables doe shewe. The declination then on that day, on the coast of Peru is 6 degrees 18 minutes.

4 Example.

With decreasing declination.

I Suppose such a thing happened on the foresaid coast of Peru, upon the tenth day of September the same year: these Tables shewe the declination of that day 5 degrees, 4 minutes, and the day following 4 degrees, 41 minutes, so that at that time of the year, in 24 houres time, the declination decreaseth 23 minutes. The Pilot shall then reckone thus: in 24 houres the declination decreaseth 23 minutes, how much in 5 $\frac{1}{2}$ houres? Facit at least 5 minutes: and from thence he shall finde, that his declination there is 5 minutes lesse then these Tables doe shewe. The Sunnes declination then upon that day, is on the Coast of Peru 4 degrees, 59 minutes.

Hence it may be understood, as before hath been said in the Examples of those that are more easterly, that a Pilote being on the coast of Peru, at two such severall times, and would observe the Sunne in one self same place, (and use these Tables of declination without the foresaid consideration) although observing well and exactly, should thereby finde 10 minutes difference in the Altitude.

5 Example.

Two shippes being together, depart out of this land, the one sayleth eastwards, and commeth by his reckoning, upon the 28 of September, in the first yeare after Leape yeare, on the other side of the Globe of the Earth, I suppose 180 degrees in Longitude distant from the Lands-end of England, findeth in these Tables the declination on that day, 2 degrees, 8 minutes. The other shippe sayleth westward, and meeteth the first shippe at the foresaid place, by his reckoning not on the 28, but on the 27 of September, and findeth the declination in the Tables for that day, one degree, 44 minutes, so that they differ in the time one day, and consequently in the declination 24 minutes, the which procedeth from this cause. The first having sayled against the rising of the Sunne 180 degrees hath shortened his time 12 houres, the other having sayled with the Sunne 180 degrees, hath, lengthened his time 12 houres, and thereby hath had one night lesse then the first: Seing then that the declination at that time in 24 houres encreaseth 24 minutes, he that sayled eastwards must reckon 12 minutes declination lesse, and he that sayled westwards 12 minutes more, then the Tables doe shewe, and so both of them shall keepe one manner of declination, to wit 1 degree, 56 minutes.

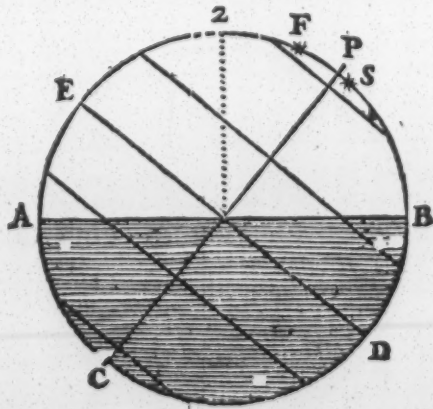
C H A P. XXVI.

For to observe the altitude of the Poles by the Starres.

For to observe the altitude by the Starres which are about the Equinoctiall, the same practife is used (subtracting or adding their declinations) even as is done with the Sunne. They that are about the Poles, we subtract or adde their distance from the Pole to their observed altitude, and so finde the altitude of the Pole.

1 Example.

Let AB be the Horizon, P the North Pole, ED the Equinoctiall, S the North Starre standing under the Pole: I observe the altitude of the North Starre SB above the



Horizon 46 degrees, and in the Table here before I finde the distance of the North Starre from the Pole PS 2 degrees, 42 minutes, that being added to the observed altitude BS, make together 48 degrees, 42 minutes for PB the altitude of the Pole.

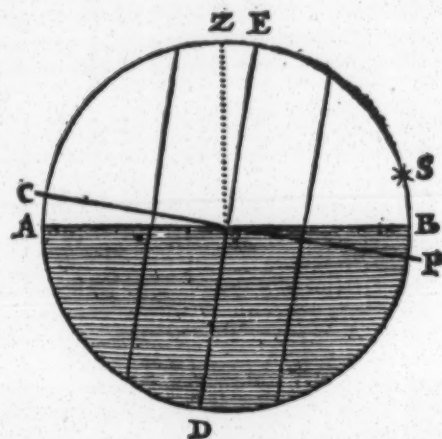
2 Example.

Let F be the brightest of the Guardes above the Pole, elevated above the Horizon FB 58 degrees, his distance from the Pole FP 14 degrees, 14 minutes, being deducted from it, (as the Table here before sheweth) there remaineth for PB the altitude of the Pole 43 deg. 46 min.

If you come to the southwards of the Line, & will use the Starres about the North Pole, then you may deduct the observed altitude from the distance of the Starres from the Pole, & so finde the depth of the North Pole under the Horizon, just to the altitude of the South Pole above it.

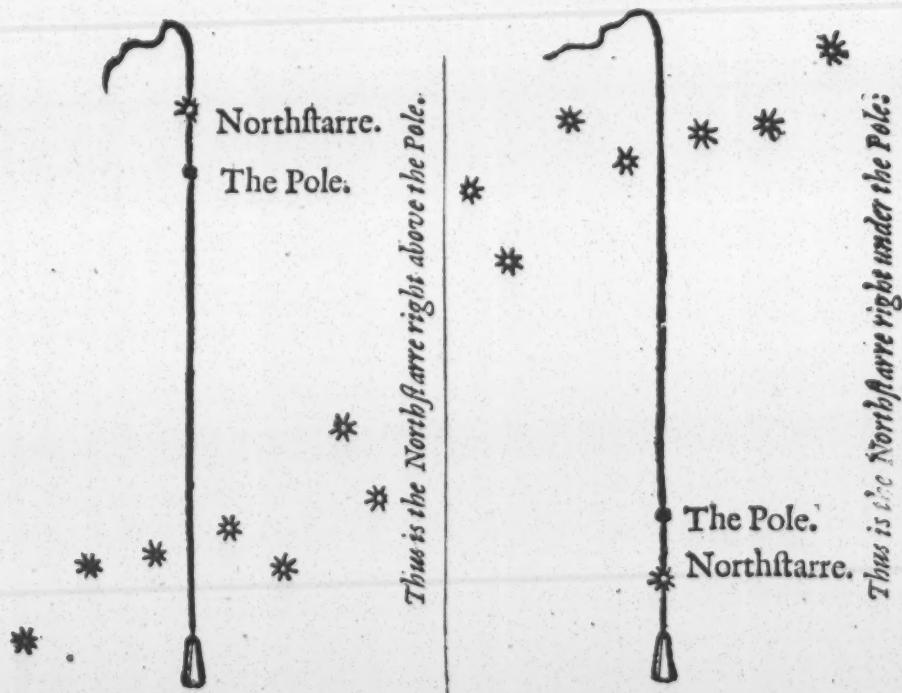
3 Example.

Let S be the north-ermost hinder wheele of Charles wayne or of the Pointers, his altitude above the Horizon in the North BS 20 degrees, that being deducted from SP 26 degrees, 14 minutes his distance from the Pole, there remaineth BP 6 degrees, 14 minutes, that the North Pole is suncken under the Horizon, just to CA the altitude of the South Pole.



Like as the Starres to the southwards, being right in the south are at their highest, so they are to the northwards being in the north, above the Pole, also at the highest, or under the Pole at the lowest, that you may almost see by the eie, for many that stand some what farre from the Pole, to wit, when they stand under or above the Northstarre, but not rightly, because the Northstarre it selfe, by his owne turning about the Pole doth digresse to the one and the other side, from the right north, so that you must finde by observation (when they come neare the north) the right lowest or highest.

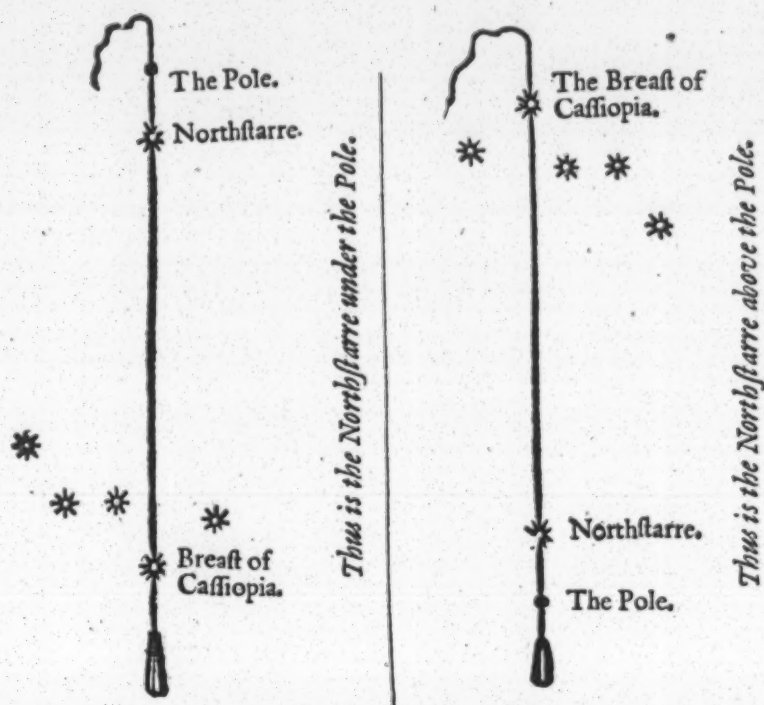
For to knowe when the Northstarre is at the highest or lowest, you must observe Charles wayne, standing in the figure of the Great Beare, when as that commeth under the Northstarre, so that if you should let hang a Plumbet right against the Northstarre, it should come to hange then also through betwixt the foursquare Starres of the same Wayne,



and the Horses, standing in the rayle of the Great Beare, then is the Northstarre right at the highest above the Pole.

Or when as the Wayne commeth so above the Northstarre, that if you should let a Plumbet hang through betwixt the Wayn & the Horses, that it hang then also right against the Northstarre, then is the Northstarre right under the Pole at the lowest, as may be seene in the figures here going before.

Or as the Starre in the Breast of Cassiopea commeth right above the Northstarre, then is the Northstarre above the Pole at the highest, and when the same is right under the Northstarre, then is the Northstarre at the lowest under the Pole, as is shewed in the figures hier fixed.



The Starres of Charles Wayne are knowne to everie man.

The Starres in Cassiopea whereof are five verie bright Starres, the chiefest are of proportion, as here standeth pourtrayed.

The second of them, that is, which standeth farthest of all distant from the Northstarre, is that in the breast, and standeth verie neare even so farre from the Northstarre, as the Starre next to the Horses of the Charles Wayne. If you hould a right staffe upon your sight, with the one end through between the Wayne and the Horses, and with the middest over the Northstarre, the other end shall then reach over the foresaid Starre in Cassiopeas breast.

C H A P. XXVII.

The use of the Northstarre as you set it by the Guardes, and the northermost hinder wheele of Charles VVayne.

Seeing that manie of the fixed Starres are not knowne by their names unto many Pilotes, and therefore doe keepe themselves onely to the use of the Northstarre, according to the points of the Compasse, we have for the benefit of such, newly calculated two kinde of Tables, the one according to the Guardes, (which unto this time we have corrected from the digression) the other according to the northermost hinder wheele of Charles Wayne, or the pointers, both upon the foure points of the compasse, of North, South, East, and West: and seeing after such a manner of working the Northstarre in divers Latitudes, hath divers situations: We have calculated the Tables, according to divers heights or Latitudes of the Earth, from 10 to 10 degrees as followeth.

In the height of 10 degrees.

When the bright-
est of the Guardes
standeth in the

East, the Northstarre is 1 degree and 28 minutes under the Pole.
North, the Northstarre is 2 degrees and 18 minutes under the Pole.
West, the Northstarre is 1 degree 22 minutes above the Pole.
South, the Northstarre is 2 degrees and 18 minutes above the Pole.

The Guardes

In the height of 20 degrees.

When the bright-
est of the Guardes
standeth in the

East, the Northstarre is 1 degree 31 minutes under the pole.
North, the northstarre two degrees 18 minutes under the pole.
West, the northstarre is 1 degree 19 minutes above the pole.
South, the northstarre is 2 degrees 19 minutes above the pole.

In the height of 30 degrees.

When the Guardes
stand in the

East, the northstarre is 1 degree 35 minutes under the pole.
North, the northstarre is 2 degrees 18 minutes under the pole.
West, the northstarre is 1 degree 14 minutes above the pole.
South, the northstarre is 2 degrees 19 minutes above the pole.

In the height of 40 degrees.

The Guardes in
the

East, the northstarre is then one degree 39 minutes under the pole.
North, the northstarre is two degrees 17 minutes under the pole.
West, the northstarre is 1 degree 10 minutes above the pole.
South, the northstarre is 2 degrees 19 minutes above the pole.

In the height of 50 degrees.

The Guardes

East, the northstarre is then one degr. 44 minutes under the pole.
North, the northstarre is 2 degr. 17 minutes lower then the pole.
West, the northstarre is 1 degr. 3 minutes above the pole.
South, the northstarre is 1 degr. 20 minutes above the pole.

In the height of 60 degrees.

The Guardes

East, the northstarre is 1 degr. 52 minutes under the pole.
North, the northstarre is 2 degr. 16 minutes under the pole.
West, the northstarre is 53 minu. higher then the pole.
South, the northstarre is 2 degr. 20 minutes above the pole.

In the height of 70 degrees.

The Guardes

East, the northstarre is 2 degr. 5 minutes under the pole.
North, the northstarre is two degr. 15 minutes under the pole.
West, the northstarre is 32 minut. above the pole.
South, the northstarre is two degr. 22 minutes above the pole.

In the height of 80 degrees.

East, the northstarre is 2 degr. 33 minutes under the pole.
North, the northstarre is two degr. 12 minutes under the pole.
West, the northstarre is 33 minutes lower then the pole.
South, the northstarre is two degr. 44 minutes higher then the pole.

The

The use of the Northstarre according to the northermost hinder wheele of Charles Wayne or the northermost of the Pointers.

In the height of 80 degrees the northermost of the Pointers can never come in equall height with the northstarre from the Horizon.

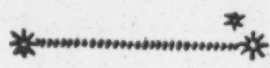
In the height of 10 degrees.

When the north-
ermost of the
Pointers standeth.

in the East, then is the northstarre 1 de-
gree 1 minute higher then the pole.
in the North, the northstarre is 2 degr.
27 minutes under the pole.
in the West, then is the northstarre 1
degr. 13 minutes lower then the pole.
in the South, it is under the Horizon out
of our sight.

The explanation of the East, West, South and North of the Guardes,
and of the Great Beare.

Northstarre.



Guardes.

The Guardes being east, that
is, when the brightest or
midlemost standeth towards the
east, just so high above the Ho-
rizon as the northstarre, as is
shewed in this first figure.

In the height of 20 degrees.

When the north-
ermost of the
Pointers standeth.

East, the northstarre is 54 minut. higher
then the pole.
North, the northstarre is two degr. 27
minutes under the pole.
West, the northstarre is 1 degr. 19 minu-
tes under the pole.
South, the northstarre is 2 degr. 27 mi-
nutes above the pole.

The Guardes being north, is
when the brightest standeth right
above the northstarre, as in this
second figure.

Guardes.



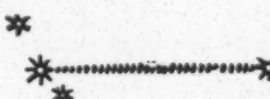
Northstarre.

In the height of 30 degrees.

When the north-
ermost of the
Pointers standeth.

East, the northstarre is 47 minut. higher
then the pole.
North, the northstarre is two degr. 27
minutes under the pole.
West, the northstarre is 1 degr. 26 minu-
tes under the pole.
South, the northstarre is two degr. 27
minutes above the pole.

Guardes.



Northstarre.

The Guardes in the west, that
is, when the middlemost of the
Guardes stand westwards from
the northstarre, & therewithall
of equal height above the Hori-
zon, as in this third figure.

Northstarre.

In the height of 40 degrees.

When the north-
ermost of the
Pointers standeth.

East, the northstarre is 38 minutes above
the pole.
North, the northstarre is two degr. 37
minutes under the pole.
West, the northstarre is 1 degr. 34 minu-
tes under the pole.
South, the northstarre is two degr. 28
minutes above the pole.

The Guardes in the south, that
is, when the brightest of them
stand right under the northstar,
as in this fourth figure.



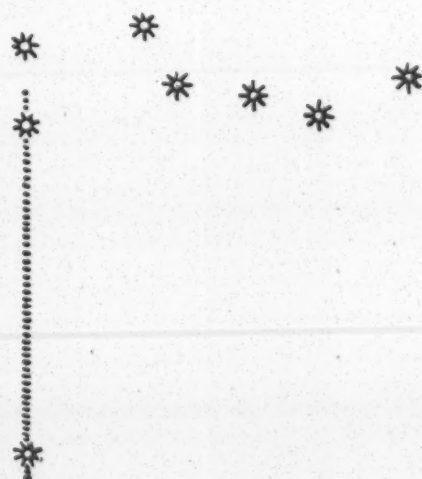
Guardes.

In the height of 50 degrees.

When the north-
ermost of the
Pointers standeth.

East, the northstarre is 24 minutes above
the pole.
North, the northstarre is two degr. 26
minutes under the pole.
West, the northstarre is 1 degr. 45 minu-
tes under the pole.
South, the northstarre is two degr. 28
minutes above the pole.

In the same manner as of the
Guardes, it is also to be under-
stood of the East, West, South
and North of the northermost
Pointers thus:



In the height of 60 degrees.

When the north-
ermost of the
Pointers standeth.

East, the northstarre is 2 minutes above
the pole.
North, the northstarre is two degr. 26
minutes under the pole.
West, the northstarre is two degr. 1 mi-
nute under the pole.
South, the northstarre is two degr. 28
minutes above the pole.

The northermost,
Pointer in the north,
that is when it stan-
deth right above the
northstarre, as is
shewed in this first fi-
gure.



In the height of 70 degrees.

When the north-
ermost of the
Pointers standeth.

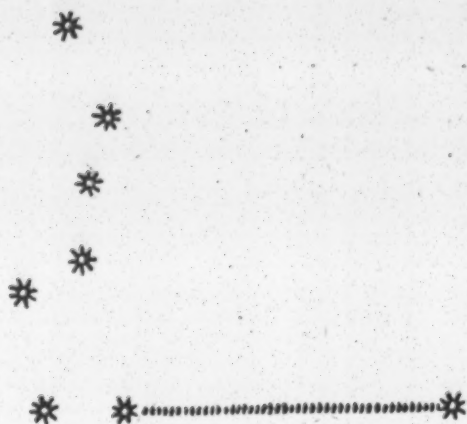
East, the northstarre is 41 minutes under
the pole.
North, the northstarre is 2 degr. 25 mi-
nutes under the pole.
West, the northstarre is 2 degr. 22 mi-
nutes under the pole.
South, the northstarre is two degr. 29
minutes above the pole.

The northermost
Pointer in the east, is
when the same stan-
deth eastwards of
equall height above
the Horizon as the
northstarre, as is in
this second figure.

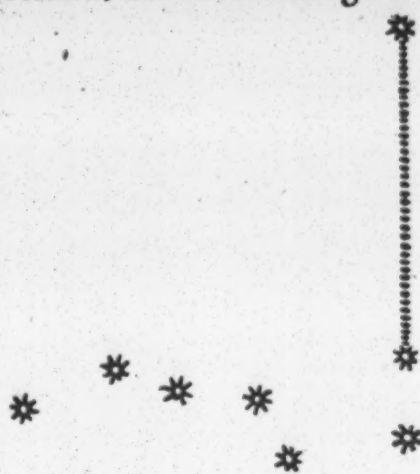


The

The same northermost Pointer of the Great Beare in the south, is when it standeth right under the northstarre, as in this third figure.



The same in the west, that is, when it standeth westward, equally high as the northstarre above the Horizon, as in this fourth figure.



The use of the foresaid Tables.

YOU must wait, untill that you have the brightest of the Guardes or the northermost Pointer upon some of the foresaid pointes, then you must observe the height of the northstarre above the Horizon. By that observed height together with the reckoning you may know verie neer the height of the Pole, at least neere enough, for to finde out of the afore said Tables, how much the Northstarre standeth higher and lower then the Pole. If it be higher, you must deduct it off, if it be lower, you must adde it to the observed height, & so is the right height of the Pole found.

These foresaid Tables are calculated onely from tenne to tenne degrees, and whereas you are most betweene such heights, you shal (when you come in other heights) consider how many degrees you are either above or under these calculated limits, and also how great the difference is betweene two such limites, having observed that, you must take of that difference, according to the height that you are in, more or lesse of the foresaid numbers, deducting or adding the same, as the matter shall require.

1 Example.

In height of 46 degrees, I desire to know how much the northstarre standeth too low, when the Guardes stand in the east, considering how great the difference is betweene the height of 40 & 50 degrees, I finde 5 minu. increasing, I say therefore: 10 degrees difference in height give 5 minutes, what shall 6 degrees give? facit 3 minutes, that being added to the one degree 39 minutes, which I finde in the Table for the 40 degrees (because that the difference from 40 to 50 degrees is increasing) I finde so one degree 42 minutes.

2 Example.

In the height of 48 degrees, I desire to knowe, how much the northstarre standeth too high, when as the northermost Pointer standeth in the east, the difference in the Table, between 40 and 50 degrees height is 14 minutes decreasing, I say therefore, 10 degrees difference in height give 14 minutes, what shall 8 degrees give? facit 11 minutes great, that being deducted from 38 minut. standing for the height of 40 degrees, (because that the difference of 40 to 50 degrees decreaseth) I finde 27 minutes, that the northstarre in the foresaid height of 48 degrees standeth too high.

C H A P. XXVIII.

Of the Elevation of the Caelestiall Lights, by reason of the vapours.

IT is known by experience, that the Sunne, Moone, and all the Starres comming more and more neare the Horizon, doe also more and more seeme to be higher then they are indeed, the cause therereof men doe hold to be, the vapours, which continually (by reason of the warmth of the water & moystures of the Earth) doe arise from the Earth,

the which the nearer they are the Horizon the thicker they are, & thereby cause the Lights to seeme to be the more elevated. The nearer also that men com to the Pole, the greater are those vapours, and thereby the Elevation of the Caelestiall Lights above their places, is the greater. The famous Astronomer Ticho Brahe hath by his exact searching in his Climate, in the Latitude of 55 degrees 56 minutes found them, as these Tables following doe shewe.

A Table of the Sunnes Elevation.

The Sunne high	0 degrees seemeth 34 minutes	higher the properly indeed he is.
	1 degrees seemeth 26 minutes	
	2 degrees seemeth 20 minutes	
	4 degrees seemeth 15 minutes	
	7 degrees seemeth 13 minutes	
	10 degrees seemeth 10 minutes	
	16 degrees seemeth 7 minutes	
	23 degrees seemeth 3 minutes	
	32 degrees seemeth 1 minut.	

A Table of the Starres Elevation.

The Star- res high	0 degrees seeme 30 minutes	higher then properly indeed they are.
	1 degrees seeme 22 minutes	
	2 degrees seeme 15 minutes	
	4 degrees seeme 11 minutes	
	7 degrees seeme 8 minutes	
	11 degrees seeme 5 minutes	
	15 degrees seeme 3 minutes	

The use of the foresaid Tables of Elevation.

IF you observe the altitude or height of the Sunne above the Horizon lesse then 32 degrees, you shall deduct so much, as the Table in the number of the observed height sheweth: If you observe the distance of the Sunne from the Zenith more then 58, you shall on the contrarie adde so much, as the Table against the Complement to 90 from the observed distance from the Zenith sheweth. The Sunne being more then 40 degrees above the Horizon, and 50 degrees from the Zenith, then these Elevations are dissolved and vanisht quite away.

1 Example.

I observe the altitude of the Sunne above the Horizon 4 degrees, the Table of the Elevation of the Sunne, sheweth me the Sunne to seeme to be 15 minutes higher then indeed he is, I deduct then the 15 minutes from mine observed height, and I keepe for the true height of the Sunne 3 degrees 45 minutes.

2 Example.

I observe the distance of the Sunne from the Zenith 74 degrees, the Complement thereof to 90 is 16, against it in the Table of the Sunne I finde 7 minutes, adding them to the observed distance, I finde so for the right distance of the Sunne 74 degrees 7 minutes.

Like as hath beene said of the Sunne, according to the Table of the Sunne, so you must do with the Starres, according to the Table of the Starres.

1 Example.

I observe in the north at the lowest the height of the middlemost Horfe of the great Wayne 7 degrees above the Horizon, I finde against it in the Table of the Starres 8 minutes, which being deducted from the observed height, I keepe for the true height 6 degrees 52 minutes.

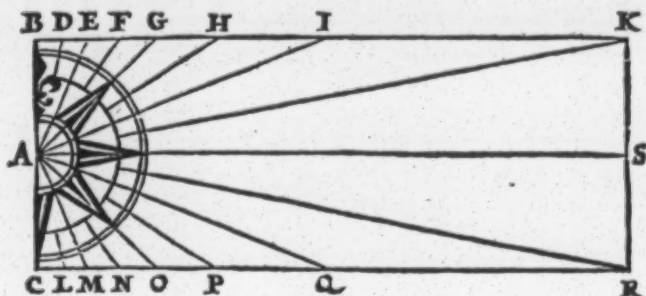
2 Example.

I observe the distance from the Zenith of the Starre called

called the great Dogge 86 degr. the Complement whereof to 90 is 4, against it I finde in the Table 11 minutes, which being added to the observed distance, I finde 86 degrees 11 minutes.

C H A P. XXIX.

How many leagues sayling upon any one point of the Compasse will raise or lay a degree of Latitude.



Vpon the point of south or north, as from A to B or C you saile for a degree 20 leagues.
And you keep still the same Meridian. Vpon the point of north and by east, or south and by east, as from A to D or L, you saile for a degree 20½ leagues.
And then you are departed from your first Meridian from whence you are sailed, as from B to D 4 leagues.
Northnortheast & southsoutheast, as from A to E or M for a degree 21½ leagues.
And your distance from the first Meridian, as from B to E 8 leagues.
Northeast and by north & southeast and by south, as from A to F or N 24 leagues.
And distance from the first Meridian, as from B to F is 31½ leagues.
Northeast and southeast you saile for a degree, as from A to G and O 28 leagues.
And distance from the first Meridian from whence you are departed, as from B to G, or from C to O 20 leagues.
Northeast and by east, and southeast and by east, as from A to H or P for a degree 36 leagues.
And distance from the first Meridian, as from B to H or C to P 30 leagues.
Eastnortheast or eastsoutheast as from A to I or Q for a degree 52½ leagues.
And then you are departed from the first Meridian, as from B to I or from C to Q 48½ leagues.
East and by north, or east and by south, as from A to K or R for a degree 103 leagues.
And then you are departed from your first Meridian, as from B to K or from C to R 100 leagues.
But if you saile east or west, as from A to S then you remaine still in one paralell or Latitude, and nether raise or laie the Pole.

C H A P. XXX.

Of the variation of the Compasse.

THE Needle or the Steele under the Compasses, touched with the Loadstone, tryeth at divers places diversly, at some places right towards the north, at other places it doeth varie towards the east, and at some other places towards the west. As for example, By the Ilands of Corvo and Flores, (the westernmost of the Azores Ilands) By Helmsbui a little by west the northcape. About 40 leagues westwards from the south point of Spitsbergen. To the eastward of the Cape de bona Esperance, at the Cape das Aguilhas, & at more places, aswell in the East as West-Indies, the needle touched sheweth or pointeth right north. Westwards from the Azores Ilands, to the eastwards of the northcape, At nova Zembla, On the coast of Spitsbergen, and to the eastwards of the Cape das Aguilhas in the whole Indies sea, it sheweth or pointeth from the north westwards: and to the eastwards of the Azores Ilands. By west the Cape de Bona Esperance, and other more places,

it pointeth from the north eastwards. The Variation of the needle is then of two kindes, to wit, from the north to the westwards, which we call westing, or northvesting, & from the north to the eastwards, which we call easting or northeasting. Each of them is also two kindes; to wit increasing or decreasing northeasting: and likewise increasing and decreasing northvesting. Increasing northeasting or northvesting, is that which increaseth when as men doe saile from the west towards the east, and decreasing northeasting or northvesting, which doth then decrease.

The same may be more plainly understood by this or such like.

1 Example.

If you saile from the Ilands Corvo & Flores, (where the needle pointeth right) on eastwards towards the coast of Spaine: the needle beginneth (& by little and little more and more) to decline off from the north towards the east, untill that you saile to the longitude of de Strait of Gibraltar, where it is at the highest (as men do hold) 13 degrees, that is, increasing northeasting. From thence sayling forth alongst the Mediterraen sea, it beginneth to decrease, untill thwart of the mouth of the Golfe of Venice; where it goeth to nothing, & the needle tryeth againe right north, that is called decreasing northeasting.

2 Example.

If you saile from the Cape das Aguilhas, (where the needle pointeth right north) on to the eastwards towards the Indies, the needle beginneth to varie off from the north toward the west, till that you come a little to the eastwards of the Iland S. Brandaon, where it is at the highest 22 degrees, or two hole pointes, that is increasing northvesting. From thence sayling forth it beginneth to decrease, untill thwart of the south point of Celebes, where the needle tryeth againe right north, this is called decreasing northvesting.

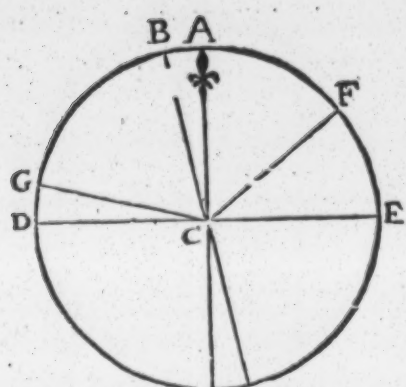
For the common Navigation from these parts to the East cuntry, to the Northwards, England & France or Spaine, the steeles are made fast under the Flye of the Compasse; (for to cause the Flowre de Luce to point right north) about two third parts of points from the north towards the east. The courses and lyings of the one land to the other in the common Seacardes of these coast, are also made after such Compasses, so that you may saile unto these places by them, without that you need to alter the Compasses, or to make any other reckoning thereupon.

In farre or long voyages over the great sea, where the needle doth varie sometimes towards the west, and then sometimes towards the east a point or two or more, it is verie needfull to looke verie warily unto it, as wel towards what side, as how much it pointeth from the north, for to be assured what course you make good in sayling.

For to find the mispointing or variation of the needle, you must seek first the right north (for to compare the variation of the needle by it) after divers manners. You must set with a Compasse, (which hath the needle and floure de Luce one right over the other) the Sunne in the morning when he riseth, & in the evening when he setteth: If so be that both the settings of the Sunne by the Compasse, doe fall equally distant from the north or south, then the Compasse or the needle pointeth right north, without any variation. If the Sunne rising be nearer the north then the Sunne setting, the variation is from the north towards the east, and you have northeasting. If the rising be farther from the north then the setting, the variation is from the north towards the west, and you have northvesting.

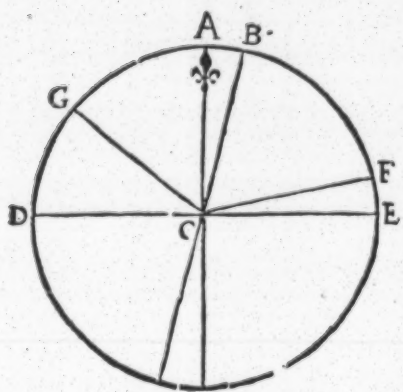
1 Example.

Let the rising of the Sunne be at F from E to the northwards of the east 40, that is from A the north 50 degrees, the setting at G from D to the northwards of the west 10, that is from A the north 80 degr. the arch G A F maketh then



if you deduct the lesser, setting by the Compasse from the west D G 10, from the greater setting by the Compasse: from the east E F 40, and the overplus 30 divide into two parts, there commeth 15 equall to B A the northeasting.

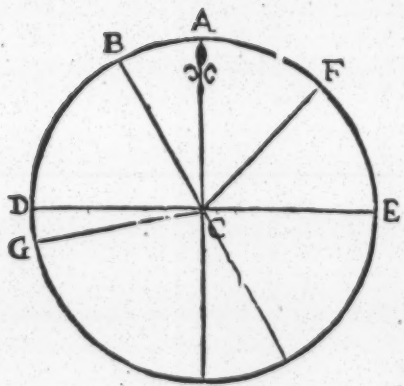
2 Example.



Let the rising of the Sunne be at F 80 degrees from the north toward the east, the setting at G 60 degrees towards the west, the arch G A F containeth then 140 degrees, which being divided into two partes at B, so that G B and B F each of them contene 70 degrees, B is then the right northpoint 10 degrees to the eastwardes of the floure de Luce, the floure de Luce or needle then pointeth 10 degrees from the true north towards the west. Or if you deduct the least setting by the Compasse from the east 10, from the most from the west 30, and the overplus 20 divide into two parts, there commeth 10 equall to A B the northwesterning of the needle.

If the rising doe happen to the southwardes of the east, and the setting to the southwardes of the west, the selfe same course is to be used towards the south, as hath been sayd in the former examples towards the north.

3 Example.



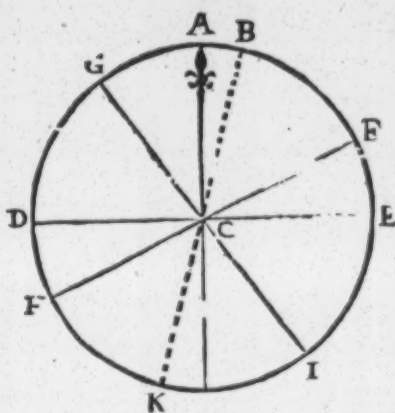
Suppose F be the rising distant from E the east 40 and from A the north 50 degrees, G the setting from D the west towards the south 16, or from the north A 106 degrees, the arch G D A F is then 156 degrees, which being divided into two parts, as before at B, so that G B and B F each of them contene 78 degrees, B shall then be the true northpoint 28 degrees, to the westwardes of the needle, which point then 28 degrees from the north towards the east. Or if you adde the least setting by the Compas to the southwardes of the west 16, to the most setting by the Compas to the northwardes of the east 40, and divide that number into two parts) there commeth 28, equall to the northeasting of the needle.

Out of these former examples, are plainly enough to be understood all other accidents, which may happen unto any man in setting or the rising and going down of the Sun.

If it happen that you can not see the Sunne at the rising & setting by reason of the thicknes of the aire, you may set it before & after noone upon one height, and doe as before is said.

4 Example.

Four or five houres before noone (the nearer the rising



the better) I observe with a Crosse staffe or Astrolabie the height of the Sun above the Horizon 10 degrees, & withall sette the Sunne with a dyall over the Compasse, or with a hanging string, & find the shaddowe of the string at G, 40 degrees from the north towards the west, so that I C G signifieth the shadow; that I note for memorie, and tarrie untill after noone, that the Sunne is againe declined to the same height as before of 10 degrees, & I see where the shadow of that hanging string then pointeth, the which I suppose it be at F 60 degrees from A the north, so that H C F doth signifie the shadow. The arch G A F 100 degr. being divided into two equall parts at B, so that G B and B F each of them contene 50 degrees, the point B is the true northpoint, the needle varieth then from the north, from B to A towards the west 10 degrees, & even so with all other such accidents.

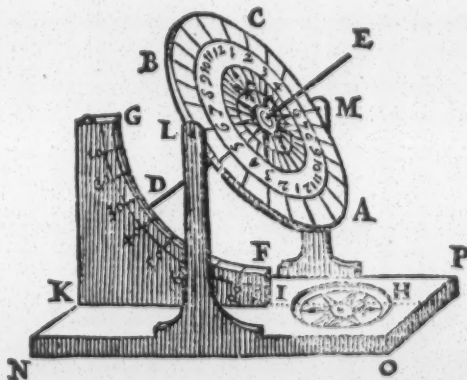
In such manner you may observe in the forenoone two, three, four or more times, as for example, the first time, when the Sunne is 5 degrees high. The second 8 or 10, the third 12 or 15, or more; and afternoone againe at the like heights: so you shall finde how the one agreeth with the other, & if you alwaies finde one same northpoint, you may be the more assured that you have wel observed. This is hereby to be considered, that the farther from the noone, and the nearer the rising & setting of the Sunne you make such observations, the more certaine they are, & the more you may trust unto them, because that the Sunne coming neare to the Meridian, doth alter but little in height, and yet differeth much by the Compasse.

C H A P. XXXI.

Of the Tydes.

IT is known by common experience, that the floud and ebbe are governed by the Moone, and also that with every new & full Moone the flouds do flow higher then ordinarie, which are called springtydes, and at the quarters of the Moone neapetydes, so that we do know with sufficient certainty before hand, by former experience (although the true causes thereof yet are unkown unto men) the houre of tydes to come, and upon what point the Moone maketh high water at each severall place, to the great help and benefit of Navigation.

We have added hereunto the Tables of the tydes, according to the common use, to wit, by each point of the Compasse, all the knowne places, where the Moone being upon such a point maketh high water. Or upon what point the Moone must be, when as at these places set together, it maketh high water or full sea.



For to know upon what point the Moon is, is done two manner of waies by setting it by the Compas, or by reckning, according to the age of the Moone, & the hour of the day. The setting according to any point, may not be done, with a com-

mon flat driving Compasse, by reason that it doth onely divide the Horizon into equall points, & sheweth in what verticalcircle or Azimuth the Sunne or Moone stand, but with a Compas, which (being elevated according to the superficies of the Equinoctiall) devideth the Equinoctiall so likewise into equall parts, as the common flat driving Compas doth divide

divide the Horizon. Such an Equinoctiall Compas is of fashion, as here before is pourtrayed: whereof the wheele A B C sheweth the superficies of the Equinoctiall, the wyre E D the axeltree of the World. The foresaid wheele must be marked on both sides, as well under as above, within with a Compas, on the out sides with twise 12 hours, and right against the east and west at L & M must so hang upon two pinnes as upon an axeltree, that it may be turned up & down, & the wyre at the under end at D on the quadrant F D G may be set upon all heights of the Pole. If then you set such a Compasse with the under bottom levell, the Line H K right north & south, to wit H to the north, & K to the south, and the under end of the wyre right against such a degree on the Quadrante F G, as the height of the Pole, that you find your selfe in: then shall the wheele A B C stand equal with the superficies of the true Equinoctiall, and the wyre E D with the axeltree of the World. The setting by such a one, or a common Compas giveth great difference, the nearer the Equinoctiall the greater, as may be understood by the examples following.

1 Example.

In the height of 50 degrees or thereabouts, the Sunne being in the beginning of Cancer at his greatest declination to the north, by a common Compas commeth not before halfe an hour after seven of the clock to the east, & at halfe an hour after foure to the west: that is, he goeth from the east through the south to the west in nine houres, but from the west through the north, untill againe in the east in 15 houres.

2 Example.

In the height of 30 degrees, he commeth a little before halfe an hour past 9 of the clock to the east, & a little after halfe an hour past two of the clock in the west, & so goeth in lesse then five houres and a halfe from the east through the south to the west, but from the west through the north until againe in the east he goeth more then 18 houres.

3 Example.

The Dragonshead being in the beginning of Aries, and the Moone in the beginning of Cancer, she maketh then five degrees more declination then the Sunne, and passeth through there in the foresaid height of 30 degrees more then one hour sooner from the east to the west, then the Sunne, to wit, in about foure houres, and againe from the west to the east in about 20 houres.

Being under the Line, and the Sunne having no declination he ariseth in the morning right in the east, and rising continueth east until that he goeth over our heads through the Zenith into the west, and continueth still going downe west, untill he commeth againe to the Horizon, & so is according to a flat driving Compasse, the one halfe day east & the other west, without comming upon any other point. It is not so with this kinde of Equinoctiall Compasse. The Sunne and Moone both goe alwaies alike time over everie one point of the Compasse, to wit, from the east to the south sixe houres, and from the south to the west sixe hou-

res, from the west through the north againe to the east in twise sixe houres.

Example.

Being under the Line & the Sun in the Equinoctiall I set the end of the wyre E right north, the other end D to the south, to the upper edge of the Quadrant at G upon O, the wyre E D shal then lie level, even with the water, like the axeltree of the World, and the wheele shall be right perpendicular over end, like as the true Equinoctiall there. The Sun comming up above the Horizon, the shadow of the wyre upon the wheele shal point upon the east, & upon the sixth hour, further ascending he riseth over the edge of the wheele, & divideth it with the shadow, in the like tyme into equall parts: being 45 degr. high above the Horizon, the shadow of the wyre shal point upon the south-east and 9 houre, being ascended up into the Zenith, the shadow shall stand right perpendicular downwards upon the south & the 12 houre, being againe descended 45 degrees, (that is halfe waies to the west) the shadow shall stand upon the southwest, and the 3 houre after noone, but comming to the Horizon, the shadow shall stand upon the west and the 6 houre. Like as this hath bene said of the Sunne, the same is also to be understood, (for so much as concerneth the points) in like manner of the Moone.

For to reckone it according to the time or age of the Moone, to that end are placed in the Tables following under each point, two columnnes of numbers, the first are the dayes of the age of the Moone, or the dayes past after the change or full Moone, the second are the hours and minutes of the same day, in which the Moon commeth to that point, & at the places the annexed maketh high water.

Example.

Eight dayes after that the Moone is new or full, I desire to know when it commeth to be south, or when it maketh high water at Emden, Enchuyfen, & the like places, (where a north and south Moone maketh full sea) I seeke under the point of north & south in the first columnne the 8 day, and find againe in the second columnne 6 houres, 24 minutes. Vpon that then shall the Moone at 6 of the clock and 24 minutes come to be north and south, and at such places make high water.

The tyde commeth later every day 48 minutes, that is foure fift parts of an houre: If a man know then at what houre the new or full Moone maketh full sea at any place, let him from that day forth reckone everie daie four fift parts of an houre later, and so he shall finde the right time of high water.

Example.

When the Moone is new or full it is at Amsterdam, Rotterdam, (and at everie place where a southwest and north-east Moone maketh full sea) high water at three of the clock, one day after the new or full Moone at 3 of the clock and 58 minutes. Two dayes after it at 4 of the clock and 36 minutes, and foure dayes after the new or full Moone at 6 of the clock and 12 minutes.

T A B L E S O F T H E T Y D E S.

South, and North.			South and by West, and North and by east.			Southsouthwest, and Northnortheast.		
da.	ho.	mi.	da.	ho.	mi.	da.	ho.	mi.
12	0	At the Ilands of Iutland.	12	45	Within the Maese.	1	30	Vnder Holyland. Before the
1	12	Before the Hever, Eider & El-	1	33	Within Terveer.	1	18	Maese and Goree. Before Ter-
2	13	ve. At Emden & Delfziel.	2	21	At Flushing.	2	3	veer. At Armuyen. Vpon the
3	24	Before Enchuyfen. Horne &	3	9	Thwart of Beach in the offing.	3	54	Flar. The Wielings. On the
4	31	Vrck. On al the coasts of Fland-	4	57	In the Cammer of Rye.	4	42	Coasts of Sealand. Before the
5	4	ders, at the Northforland, at	5	44	At Winchelsea.	5	30	Thames of London. Before
6	48	Dover in the Pier, at Beachy	6	33	In Garnsey.	6	18	Yarmouth. In Downes Road.
7	56	on the shore. At Hampton at	7	21		7	7	Thwart of the Dongie Nesse.
8	64	the Kay. Before Sherbrough	8	9		8	54	At the west end of Wight.
9	72	and the Race of Blanchey. At	9	57		9	42	Without Callice & Blacknes.
10	8	Orfordnes. In the Condado.	10	45		10	30	In Bluet.
11	88	At Gibraltar in the road.	11	33		11	18	At Belile on the land.
12	96		12	21		12	6	
13	104		13	9		13	54	
14	112		14	57		14	42	
15	120		15	45		15	30	
Southwest & by south, & Northeast & by north.			Southwest and Northeast.			Southwest & by west, & Northeast & by east.		
da.	ho.	mi.	da.	ho.	mi.	da.	ho.	mi.
0	21	Without Fontenay.	0	3	At Amsterdam, Rotterdam,	0	34	Betweene the Heads and the
1	3	Without Bluer.	1	38	Dort, and Zierickzee. Before	1	43	Maese. At Roan. In Silly. Be-
2	31	Vnder Bellile.	2	46	Newcastle. In Robbinhoods	2	51	fore S. Matthews point. In Brest
3	49	Before the Wielings.	3	54	Bay. Before the Tees & Hartle-	3	6	and Croydon. In the Sound
4	57	Before the Maese.	4	12	poole. Without the Flemish	4	57	between Vshant & the Mayn.
5	61		5	7	Banks. In the Strait between	5	45	Before the Bosse. At S. Martens.
6	7		6	48	Callice & Dover. Before Con-	6	33	Before Rochell. Before Browa-
7	71		7	36	quer. The Pennes, Groy, Ar-	7	21	ge, at Royane in the River of
8	83		8	24	mentiers, Vse, Killiats, Port-	8	10	Bordeaux. Within the havens
9	92		9	12	hus, the River of Bordeaux,	9	57	on the coastes of Spaine, Por-
10	101		10	11	the southcoast of Bretagne.	10	45	tugall, Galicia, the fouthside
11	11		11	48	Gascoigne and Poitou. The	11	33	of Bretagne, Gascoigne, and
12	115		12	36	coasts of Biscay, Galicia, Por-	12	21	the westcoast of Ireland.
13	129		13	24	tugall and of Spaine. On the	13	9	
14	137		14	12	westcoast of Ireland. At Boeck-	14	57	
15	215		15	3	nes and Orcanays. In Hitland	15	45	
					and Fayrehill.			
Westsouthwest, and Eastnortheast.			West & by south, and East and by north.			West and East.		
da.	ho.	mi.	da.	ho.	mi.	da.	ho.	mi.
0	43	From the Tessel to the Heads	0	51	In Torbay and Dortmund.	0	6	Before Hamburg.
1	51	in the fareway. Before the	1	6	In Plimmouth and Foy.	1	64	Before Bremen.
2	6	Hommer. Before Flambrough	2	61	In the Sea of Wales.	2	73	Before the Marfdeep or Tessel.
3	54	and Scarbrough. Abberwrack.	3	73	In Falmouth.	3	82	At Hull.
4	42	In Falmouth. In Mouschole.	4	82	In Milford.	4	91	At Blankeny and Wels.
5	30	Set Iles. S. Pauls without the	5	91	At Ramsey in Wales.	5	10	Before Anwerpe.
6	18	haven. Between Garnzey and	6	10	Thwart of Londony.	6	104	Ter Goes.
7	10	Set Iles in the fareway. In the	7	10	Before Lin in England.	7	113	At Concallo & S. Malloes.
8	54	Broadfound. Without the	8	11	In al the havens upon the	8	124	S. Powles in the haven.
9	42	Fourne. Al the fouthcoasts of	9	12	fouthcoast of Ireland.	9	112	Without Silly in the Chanel.
10	30	Ireland, as Kinfael, Corck,	10	11		10	2	
11	18	lochul, Waterford, and Cape	11	2		11	248	
12	2	Cleere.	12	2		12	336	
13	254		13	339		13	424	
14	342		14	427		14	512	
15	430		15	515		15	60	
West and by north, and East & by south.			Westnorthwest, and Eastfourtheast.			Northwest & by west, & Southeast & by east.		
da.	ho.	mi.	da.	ho.	mi.	da.	ho.	mi.
0	64	Betweene Foie & Falmouth in	0	73	At the Nes by Wieringhen.	0	81	Without the Caskers in the
1	73	the Channel.	1	81	In the road of Tessel.	1	9	Channell.
2	82	At Bristow at the Kaie.	2	9	At Kilduyn.	2	9	Thwart of Wight in the Chan-
3	9	Before S. Nicholas & Podes-	3	94	Amidst the Channell in the	3	103	nell.
4	97	femske.	4	102	farewaie.	4	112	From Wight to Beachie by the
5	104	At Waymouth at the Kaie.	5	110	Thwart of the Steart in the	5	121	land.
6	113		6	118	Channell.	6	1	On the coast by west the For-
7	121		7	1	Betweene Mouschole & Fal-	7	151	land.
8	1		8	14	mouth in the offing.	8	239	Without the Flie.
9	157		9	242	Thwart of Plimmouth in the	9	327	
10	245		10	330	offing.	10	415	
11	333		11	418	At the Lizart on the land.	11	5	
12	421		12	5		12	551	
13	5		13	54		13	629	
14	557		14	642		14	737	
15	645		15	730		15	815	
Northwest, and Southeast.			Northw. & by north, & Southeast & by south.			Northnorthwest, and Southsoutheast.		
da.	ho.	mi.	da.	ho.	mi.	da.	ho.	mi.
0	9	Before the Easter and Wester	0	94	The Needles of Wight.	0	103	At Orfordnes and Harwich
1	948	Eemfes.	1	103	In the Channell thwart of	1	118	without the banks.
2	1036	Before the Flie.	2	11	Wight.	2	12	At Leystaf in the road.
3	1124	Before the Scholbalg.	3	12	The Caskers.	3	1254	Yarmouth in the road.
4	1212	On al the coasts of Friesland.	4	1257	Thwart of Garnzey in the	4	142	Before the Thames of London.
5	1	Vpon the Frize and Wieringer	5	145	Channell.	5	230	At Wight within.
6	148	Flat.	6	233	Thwart of Leystasse & Yar-	6	318	At Bolloigne Deep & Seyne-
7	236	Before Cromer, Winterton, &	7	321	mouth without the banks.	7	4	head.
8	324	Yarmouth.	8	4	Ter Gouwe.	8	454	In the Fosse of Caen.
9	412	Within the Seyne.	9	457	At Dunnose of Wight.	9	542	At Struyfart & all the coast of
10	5	At the east end of Wight.	10	545		10	630	Normandie and Picardie.
11	548	In the Race of Portland.	11	633		11	718	At S. Ellens & the Cowes.
12	636	Betweene Garnsey & the Caf-	12	721		12	8	
13	724	kettes.	13	8		13	854	
14	812		14	857		14	942	
15	9		15	945		15	1030	

North and by west, and South and by east.

0	11	15	Between Crippelfand and the	Setting of
1	12	3	Creyl.	the Tydes
2	12	51	At Orfordnes within.	upon the
3	13	9	At Hampton.	same point.
4	2	27	At Portsmouth & at Dunnofe.	
5	3	15	At the Cowes in Wight.	From S. Ma-
6	4	3	Before the haven of Caen.	thewes point
7	4	51	Within the Thames of Lon-	to the Bake-
8	5	39	don.	ovens.
9	6	27		From Fonte-
10	7	15		nay to Saint
11	8	3		Mathewes
12	8	51		point.
13	9	39		
14	10	27		
15	11	15		

then it is new Moone the first day of that moneth: so much as it is lesse then 30, so maine daies there are yet to the new Moone.

Example.

In the yeare 1650 I desire to know when it shall be new Moone, in the moneth of August: the Epact of that yeare is 27, adding thereto 6 for the number of the months past of from March (the moneth August being counted therein) maketh 33, 30 taken away, remaineth 3, there wanteth 27 30, the Moone then shall bee the 27 day after (that is the 27 of August) new.

The Epact, the number of the moneth from March off, & the day of the moneth being added together, that number (or what it bringeth out more then 30) sheweth the age of the Moone.

C H A P. X X X I I.

For to finde the age of the Moone.

Example.

For to finde the age of the Moone without an Almanacke the Epact of the yeare must be knowne, which is found out of the Golden number, and the Golden number thus. See how many yeares are past since the yeare of our Lord 1500, devide them by 19, that which is the remainder is the Golden number of that yeare, if there remaine nothing, then the Golden number is 19.

Example.

I desire to knowe the Golden number of the yeare 1648, setting the 1500 yeares a side, I devide the 158 by 9, I finde 7 times, and that there remaineth 15, the Golden number of the yeare 1648 then is 15.

The Golden number increaseth everie yeare with the beginning of the yeare, with one, as in the yeare 1645 it shall be 12 in the yeare 1646, 13, and so forth unto 19, and then again 1, 2, 3, &c.

The Epact changeth everie yeare upon the first day of March, increasing by 11, and that to 30, If it be more then 30, you must leave the 30, & that which remaineth is the Epact. The Epact is found out by the Golden number thus. Count the Golden number upon the three joynts of your thumb, beginning with 1 at the lowest joynt, unto the Golden number of your propounded year, if that the counting end at the lowest joynt, the Epact and the Golden number are alike, if it end at the second joynt, adde 10, if at the third, adde 20 to the same Golden number: that number then is the Epact of that yeare.

Example.

I desire to know the Epact for the yeare 1644, the Golden number is 11, counting upon the three joyntes of the thumb, beginning with 1 at the lowest joynt, the counting endeth with 11 at the middlemost joynt, adding therefore 10 to 11, the Golden number, I have 21 for the Epact of that yeare.

According to the Old stile, the Golden number is all one, as according to the New stile, but the Epact is 10 more, therefore, if you adde 10 to the Epact of the New stile, you have the Epact for the Old stile, as for the yeare 1644, 10 to 11 (the Epact of the New stile) maketh 21.

For to finde the Epact without reckoning, when as the Golden number is knowne, as wel for the Old, as for the New stile, behold this table following, where they are set one against the other.

Golden number.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
New Epact.	1	12	23	4	15	26	7	18	29	10	21	2	13	24	5	16	27	8	19
Olde Epact.	11	22	3	14	25	6	17	28	9	20	1	12	23	4	15	26	7	18	29

The Epact being knowne, adde it to the number of the moneth past of from March, to the moneth that you are in, including both monerhs, if that bring out together just 30,

For to knowe the age of the Moone upon the 12 of August 1646, I adde the Epact 13 to 6, the moneths past from March, and 12 for the twelfth day, make together 31, the 30 taken away, there remaineth 17 for the age of the Moone upon that day. All this is to be understood according to the New stile.

For the easier finding out of the time of the New Moone, without any reckoning, we have added hereunto an Almanack for 9 yeares, following one after the other, calculated for the Meridian of Amsterdam, shewing the day and houre of everie new & full Moone, together with each quarter of the same: The use where of is after this manner. Vnder the Moones against each moneth stand two columnes of cyfers, the first sheweth the day of the moneth, the second the houre and minute of the new or full Moone, to reckon from the midday of that day, to the midday of the day following, according to the custome, or use of the Astronomers.

1 Example.

In the yeare 1646, I would know upon what day & houre the new Moone shall be, in the moneth Iuly, I seeke therefore in that yeare the moneth Iuly, & finde new Moone the 3 day 16 houres and 32 minutes: counting forth from that midday 16 houres 32 minutes, that commeth to the next day; the 4 in the morning at 4 of the clock and 32 minutes after midnight.

For to knowe what day of the weeke that is, the Dominicall letter of that yeare must first be knowne, and with what letter each moneth beginneth. The Dominicall letters are to be found under every yeares Almanack, the Leape yeares have two, the first whereof is used untill the 25 of Februarie, and the other fourth on unto the end of the yeare, and everie moneth beginneth with such a letter, as this Table following sheweth.

Ianuarie	{	A	Iulie	{	G
Februarie	{	D	August	{	C
March	{	D	September	{	F
Aprill	{	G	October	{	A
May	{	B	November	{	D
Iune	{	E	December	{	F

Seeing then that Iulie beginneth with a G you shall therefore beginne to tell in the Circle of letters hereunder at G, & forth round about to 10, that falleth upon B, that is the third day after F the Sundayes letter of that yeare, it shall be then Wednesday. And so with all the other. In the Leape year, you must tell both the 24 and 25 upon the F, because that the 25 day is also added therein with an F, as the 24 is.

A
G B
F C
E D

S A L M A

T A B L E S O F T H E T Y D E S.

South, and North.			South and by West, and North and by east.			Southsouthwest, and Northnortheast.		
da.	ho.	mi.	da.	ho.	mi.	da.	ho.	mi.
0	12	0	0	12	45	0	1	30
1	12	48	1	1	33	1	2	18
2	1	36	2	2	21	2	3	6
3	2	24	3	3	9	3	3	54
4	3	12	4	3	57	4	4	42
5	4	0	5	4	45	5	5	30
6	4	48	6	5	33	6	6	18
7	5	36	7	6	21	7	7	6
8	6	24	8	7	9	8	7	54
9	7	12	9	7	57	9	8	42
10	8	0	10	8	45	10	9	30
11	8	48	11	9	33	11	10	18
12	9	36	12	10	21	12	11	6
13	10	24	13	11	9	13	11	54
14	11	12	14	11	57	14	12	42
15	12	0	15	12	45	15	1	30
At the Ilands of Iutland.			Within the Maefe.			Vnder Holyland. Before the		
Before the Hever, Eider & El-			Within Terveer.			Maefe and Goree. Before Ter-		
ve. At Emden & Delfziel.			At Flushing.			veer. At Armuyen. Vpon the		
Before Enchuyfen, Horne &			Thwart of Beach in the offing.			Flat. The Wielings. On the		
Vrck, On al the coasts of Flan-			In the Cammer of Rye.			Coasts of Sealand. Before the		
ders, at the Northforland, at			At Winchelsee.			Thames of London. Before		
Dover in the Pier, at Beachy			In Garnsey.			Yarmouth. In Downes Road.		
on the shore. At Hampton at						Thwart of the Dongie Nefse.		
the Kay. Before Sherbrough						At the west end of Wight.		
and the Race of Blanchey. At						Without Callice & Blacknes.		
Orfordnes. In the Condado.						In Bluet.		
At Gibraltar in the road.						At Belile on the land.		
						</		

North and by west, and South and by east.

0	11	15	Between Cripplesand and the	Setting of
1	12	3	Creyll.	the Tydes
2	12	51	At Orfordnes within.	upon the
3	1	39	At Hampton.	same point.
4	2	27	At Portsmouth & at Dunnofe.	From S.Ma-
5	3	15	At the Cowes in Wight.	thewes point
6	4	3	Before the haven of Caen.	to the Bake-
7	4	51	Within the Thames of Lon-	ovens.
8	5	39	don.	From Fonte-
9	6	27		nay to Saint
10	7	15		Mathewes
11	8	3		point.
12	8	51		
13	9	39		
14	10	27		
15	11	15		

C H A P. X X X I I.

For to finde the age of the Moone.

For to finde the age of the Moone without an Almanacke the Epact of the year must be knowne, which is found out of the Golden number, and the Golden number thus. See how many yeares are past since the yeare of our Lord 1500, deuide them by 19, that which is the remainder is the Golden number of that yeare, if there remaine nothing, then the Golden number is 19.

Example.

I desire to knowe the Golden number of the year 1648, setting the 1500 yeares a side, I deuide the 158 by 9, I finde 7 times, and that there remaineth 15, the Golden number of the year 1648 then is 15.

The Golden number increaseth everie year with the beginning of the year, with one, as in the year 1645 it shall be 12 in the year 1646, 13, and so forth unto 19, and then again 1, 2, 3, &c.

The Epact changeth everie year upon the first day of March, increaseth by 11, and that to 30, If it be more then 30, you must leave the 30, & that which remaineth is the Epact. The Epact is found out by the Golden number thus. Count the Golden number upon the three joynts of your thumb, beginning with 1 at the lowest joynt, unto the Golden number of your propounded year, if that the counting end at the lowest joynt, the Epact and the Golden number are alike, if it end at the second joynt, adde 10, if at the third, adde 20 to the same Golden number: that number then is the Epact of that year.

Example.

I desire to know the Epact for the year 1644, the Golden number is 11, counting upon the three joyntes of the thumb, beginning with 1 at the lowest joynt, the counting endeth with 11 at the middlemost joynt, adding therefore 10 to 11, the Golden number, I have 21 for the Epact of that year.

According to the Old stile, the Golden number is all one, as according to the New stile, but the Epact is 10 more, therefore, if you adde 10 to the Epact of the New stile, you have the Epact for the Old stile, as for the year 1644, 10 to 11 (the Epact of the New stile) maketh 21.

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Olde Epact.	11	22	3	14	25	6	17	28	9	20	1	12	23	4	15	26	7	18	29

The Epact being knowne, adde it to the number of the moneth past of from March, to the moneth that you are in, including both moneths, if that bring out together just 30,

then it is new Moone the first day of that moneth: so much as it is lesse then 30, so maine daies there are yet to the new Moone.

Example.

In the year 1650 I desire to know when it shall be new Moone, in the moneth of August: the Epact of that yeare is 27, adding thereto 6 for the number of the months past of from March (the moneth August being counted therein) maketh 33, 30 taken away, remaineth 3, there wanteth 27 30, the Moone then shall bee the 27 day after (that is the 27 of August) new.

The Epact, the number of the moneth from March off, & the day of the moneth being added together, that number (or what it bringeth out more then 30) sheweth the age of the Moone.

Example.

For to knowe the age of the Moone upon the 12 of August 1646, I adde the Epact 13 to 6, the moneths past from March, and 12 for the twelfth day, make together 31, the 30 taken away, there remaineth 17 for the age of the Moone upon that day. All this is to be understood according to the New stile.

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For to knowe what day of the weeke that is, the Dominicall letter of that yeare must first be knowne, and with what letter each moneth beginneth. The Dominicall letters are to be found under every yeares Almanack, the Leape yeares have two, the first whereof is used untill the 25 of Februarie, and the other fourth on unto the end of the yeare, and everie moneth beginneth with such a letter, as this Table following sheweth.

Ianuarie	{	A	Iulie	{	G
Februarie	{	D	August	{	C
March	{	D	September	{	F
Aprill	{	G	October	{	A
May	{	B	November	{	D
Iune	{	E	December	{	F

Seeing then that Iulie beginneth with a G you shall therefore beginne to tell in the Circle of letters hereunder at G, & forth round about to 10, that falleth upon B, that is the third day after F the Sundayes letter of that yeare, it shall be then Wednesday. And so with all the other. In the Leape year, you must tell both the 24 and 25 upon the F, because that the 25 day is also added therein with an F, as the 24 is.

A
G B
F C
E D

g

A L M A-

A L M A N A C K

Or Prognostication for the tyme of nine years following.

Almanacke for the year 1643. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
full moone	4	14	6	full moone	1	7	20
last quarter	12	19	10	last quarter	8	16	47
new moone	19	18	16	new moone	15	9	1
first quarter	26	10	52	first quarter	23	13	20
full moone	3	9	4	full moone	30	15	11
last quarter	11	10	54	last quarter	6	6	32
new moone	18	4	16	new moone	13	23	46
first quarter	25	0	42	first quarter	22	3	15
full moone	5	3	51	full moone	28	22	51
last quarter	12	22	43	last quarter	4	16	16
new moone	19	13	55	new moone	12	16	10
first quarter	26	16	32	first quarter	20	16	17
full moone	3	20	51	full moone	27	7	9
last quarter	11	6	57	last quarter	4	5	0
new moone	17	23	31	new moone	12	9	30
first quarter	25	9	45	first quarter	20	0	54
full moone	3	10	58	full moone	26	16	48
last quarter	10	12	57	last quarter	2	22	5
new moone	17	9	40	new moone	13	2	31
first quarter	25	3	43	first quarter	18	9	46
full moone	1	22	19	full moone	25	4	15
last quarter	8	18	4	last quarter	2	18	53
new moone	15	20	39	new moone	10	18	10
first quarter	23	21	16	first quarter	17	18	16
				full moone	24	18	0

The Golden number of this year is 10. The Circle of the Sun 28. Dominical letter D. Romane Indiction 11. The Epact 10. From the Nativitie of Christ to Shrove Sunday 7 weekes 3 dayes. Quadragesima the 22 of Februarie. Easter the 5 of Aprill. Ascension day the 14 of May. Whit Sunday the 24 of May. Advent the 29 of November.

Four Eclipses shall be seen this year, 2 of the Sunne and 2 of the Moone, whereof the last of the Moone shall appeare with us. The other appeare without our Horizon, in the east parts of Asia, China, upon, and the east Ilands of Philippina.

Almanacke for the year 1644. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
last quarter	1	16	54	new moone	3	16	12
new moone	9	8	3	first quarter	11	11	14
first quarter	16	2	50	full moone	19	5	3
full moone	23	9	56	last quarter	26	1	36
last quarter	31	14	50	new moone	2	3	36
new moone	7	20	9	first quarter	10	4	40
first quarter	14	12	6	full moone	17	14	45
full moone	22	3	31	last quarter	24	7	5
last quarter	1	8	6	new moone	31	17	16
new moone	8	6	22	first quarter	8	21	14
first quarter	14	22	32	full moone	15	23	53
full moone	22	21	38	last quarter	22	14	48
last quarter	30	21	54	new moone	30	9	4
new moone	6	15	15	first quarter	8	12	20
first quarter	13	11	0	full moone	15	8	53
full moone	21	14	36	last quarter	22	1	52
last quarter	29	7	54	new moone	30	3	28
new moone	5	23	10	first quarter	7	1	42
first quarter	13	19	4	full moone	13	18	20
full moone	21	5	30	last quarter	20	17	14
last quarter	28	15	15	new moone	28	22	0
new moone	4	7	25	first quarter	6	13	22
first quarter	11	17	51	full moone	13	5	2
full moone	19	18	12	last quarter	20	12	15
last quarter	26	21	35	new moone	28	15	42

The Golden number of this year is 11. The Circle of the Sun 1. The Dominical letter C. B. Romane Indiction 12. The Epact 21. From the Nativitie of Christ to Shrove Sunday 8 weekes and 2 dayes. Quadragesima the 14 of Februarie. Easter the 27 of March. Ascension the 1 of May. Whit Sunday the 11 of May. Advent the 27 of November.

Wee have in this year 2 Eclipses in the Sunne, the first shall happen the 8 of March new stile, and shall be seen in the south parts of America, Peru, and there about. The 2 the 1 of September, and shall in some part appeare to our sight.

Almanacke for the year 1645. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
first quarter	4	23	0	full moone	8	12	34
full moone	11	17	21	last quarter	15	22	41
last quarter	19	9	40	new moone	22	14	28
new moone	27	7	36	first quarter	27	8	53
first quarter	3	7	5	full moone	7	1	30
full moone	10	7	28	last quarter	14	3	57
last quarter	18	7	0	new moone	21	0	17
new moone	25	21	5	first quarter	28	16	37
first quarter	4	14	35	full moone	5	13	27
full moone	11	22	51	last quarter	12	9	23
last quarter	20	2	20	new moone	19	12	40
new moone	27	7	42	first quarter	27	13	24
first quarter	2	22	34	full moone	5	0	20
full moone	10	13	40	last quarter	11	16	21
last quarter	18	18	20	new moone	19	3	40
new moone	25	16	12	first quarter	27	8	0
first quarter	2	8	40	full moone	3	10	14
full moone	10	6	48	last quarter	10	2	0
last quarter	18	6	47	new moone	17	21	18
new moone	24	23	25	first quarter	26	1	0
first quarter	31	19	34	full moone	2	20	34
full moone	8	22	5	last quarter	9	15	7
last quarter	16	16	0	new moone	17	16	38
new moone	23	6	16	first quarter	25	15	14
first quarter	30	9	10				

The Golden number of this year is 12. The Circle of the Sunne 2. The Dominical letter A. Romane Indiction 13. Epact 2. From the Nativitie of Christ to Shrove Sunday 9 weekes. Quadragesima the 5 of March. Easter the 16 of Aprill. Ascension the 25 of May. Whit Sunday the 4 of June. Advent the 3 of December.

In this year there shall be seen 4 Eclipses, 2 in the Sunne, & 2 in the Moone, the first in the Moone shall appeare the 10 of Februarie, at evening about 7 a clock, and shall continue 3 houres and 13 minutes. The second shall happen in the Sunne the 21 of August at noone, which both of them shall be seen of us. The other happen without our Horizon.

Almanacke for the year 1646. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
full moone	1	7	6	last quarter	5	14	7
last quarter	8	7	5	new moone	12	6	38
new moone	16	12	0	first quarter	19	2	32
first quarter	24	2	26	full moone	27	5	23
full moone	30	18	34	last quarter	3	23	0
last quarter	7	2	12	new moone	10	14	6
new moone	15	5	36	first quarter	17	16	10
first quarter	22	11	0	full moone	25	20	28
full moone	1	6	2	last quarter	2	6	7
last quarter	8	22	25	new moone	8	22	50
new moone	16	19	40	first quarter	16	9	10
first quarter	23	18	0	full moone	24	10	39
full moone	30	19	5	last quarter	1	12	48
last quarter	7	18	18	new moone	8	9	48
new moone	15	7	25	first quarter	16	4	55
first quarter	22	0	30	full moone	23	23	34
full moone	29	8	33	last quarter	30	19	57
last quarter	7	12	9	new moone	6	23	25
new moone	14	16	25	first quarter	13	1	55
first quarter	21	7	36	full moone	22	11	36
full moone	28	22	48	last quarter	29	4	40
last quarter	6	2	46	new moone	6	16	15
new moone	12	23	38	first quarter	14	21	44
first quarter	19	15	56	full moone	21	23	5
full moone	27	13	57	last quarter	28	15	14

The Golden number of this year is 13. The Dominical letter G. Romane Indiction 14. The Epact 13. From the Nativitie of Christ to Shrove Sunday 6 weekes and 6 dayes. Quadragesima the 11 of Februarie. Easter the 1 of Aprill. Ascension the 10 of May. Whit Sunday the 20 of May. Advent the 2 of December.

Four Eclipses come in this year, two of the Sunne & two of the Moone, whereof the first in the Moone only shall be seen with us and shall appeare the 30 of Ianuarie 18 houres 6 minutes, & shall continue one hour 55 minutes, all the other shall be seen without our Horizon.

Almanacke for the year 1647. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
new moone	5	11	25	new moone	1	23	44
first quarter	13	14	30	first quarter	8	14	35
full moone	20	9	55	full moone	16	6	17
last quarter	27	4	20	last quarter	24	9	27
new moone	4	6	40	new moone	31	7	14
first quarter	12	4	2	first quarter	6	22	43
full moone	18	19	56	full moone	14	21	45
last quarter	25	19	12	last quarter	22	21	21
new moone	6	1	22	new moone	29	14	36
first quarter	13	14	0	first quarter	5	10	20
full moone	20	6	12	full moone	13	13	53
last quarter	27	14	18	last quarter	21	7	30
new moone	4	16	45	new moone	27	22	48
first quarter	12	11	33	first quarter	5	1	48
full moone	18	16	20	full moone	13	6	0
last quarter	26	9	7	last quarter	20	16	18
new moone	4	5	13	new moone	27	8	52
first quarter	11	3	18	first quarter	3	21	0
full moone	18	3	29	full moone	11	21	38
last quarter	26	3	14	last quarter	19	0	22
new moone	2	15	38	new moone	25	21	32
first quarter	9	8	32	first quarter	3	18	24
full moone	16	16	2	full moone	11	12	8
last quarter	24	19	32	last quarter	18	8	18
				new moone	25	13	7

The Golden number of this year is 14. The Dominical letter F. Romane Indiction 15. The Epact 24. From the Nativitie of Christ to Shrove Sunday 9 weekes and 5 dayes. Quadragesima 10 of March. Easter the 21 of Aprill. Ascension the 30 of May. Whit Sunday the 9 of June. Advent the first of December.

Four Eclipses shall be seen this year, three of the Sunne and one of the Moone, whereof that in the Moone only shall be seen in our Horizon.

Almanacke for the year 1648. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
first quarter	2	15	49	full moone	4	11	37
full moone	10	1	12	last quarter	12	9	48
last quarter	16	27	53	new moone	19	22	54
new moone	24	6	46	first quarter	26	15	25
first quarter	1	11	13	full moone	2	23	35
full moone	8	12	22	last quarter	11	12	30
last quarter	15	3	49	new moone	18	7	18
new moone	23	1	12	first quarter	24	22	5
first quarter	2	3	16	full moone	1	14	12
full moone	8	21	56	last quarter	9	17	50
last quarter	15	17	42	new moone	16	15	24
new moone	23	19	0	first quarter	23	7	50
first quarter	31	15	23	full moone	1	6	37
full moone	7	6	34	last quarter	9	7	18
last quarter	14	7	27	new moone	15	23	56
new moone	22	11	7	first quarter	22	21	5
first quarter	29	23	58	full moone	31	0	30
full moone	6	15	7	last quarter	6	18	43
last quarter	13	3	37	new moone	14	8	12
new moone	22	1	11	first quarter	21	14	56
first quarter	29	5	46	full moone	29	18	38
full moone	5	0	20	last quarter	7	4	22
last quarter	12	16	42	new moone	13	21	46
new moone	20	12	56	first quarter	21	10	34
first quarter	27	10	25	full moone	29	11	30

The Golden number of this year is 15. The Dominical letter E. D. Romane Indiction 1. The Epact 5. From the Nativitie of Christ to Shrove Sunday 8 weekes 4 dayes. Quadragesima the first of March. Easter the first of Aprill. Ascension the 21 of May. Whit Sunday the 31 of May. Advent the 29 of November.

Four Eclipses shall be seen this year, two of the Moone, and two of the Sunne, whereof only the last in the Moone shall be seen in these climates the 30 of November, about 6 of the clock, 38 minutes in the morning, and shall continue 3 houres, 6 minutes.

Almanacke for the year 1649. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
last quarter	1	4	22	last quarter	1	6	27
new moone	12	12	45	new moone	9	8	44
first quarter	20	8	30	first quarter	16	12	40
full moone	28	1	50	full moone	23	7	52
last quarter	3	20	52	last quarter	30	23	34
new moone	11	2	48	new moone	7	20	18
first quarter	19	5	40	first quarter	14	17	54
full moone	26	13	39	full moone	21	18	46
last quarter	5	5	34	last quarter	29	17	58
new moone	12	19	6	new moone	6	6	32
first quarter	20	23	52	first quarter	12	23	56
full moone	27	23	14	full moone	20	7	50
last quarter	3	15	16	last quarter	28	12	0
new moone	11	11	52	new moone	5	16	14
first quarter	19	13	20	first quarter	12	8	15
full moone	26	7	28	full moone	20	0	10
last quarter	3	2	20	last quarter	28	4	41
new moone	11	4	12	new moone	4	2	2
first quarter	19	0	3	first quarter	20	19	0
full moone	25	15	0	full moone	18	19	0
last quarter	1	15	33	last quarter	26	19	10
new moone	9	19	20	new moone	3	12	21
first quarter	17	7	10	first quarter	10	9	42
full moone	23	22	34	full moone	18	14	31
				last quarter	26	7	12

Almanacke for the year 1650. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
new moone	1	23	0	first quarter	6	7	0
first quarter	9	4	6	full moone	12	22	22
full moone	17	8	52	last quarter	19	22	20
last quarter	24	17	6	new moone	28	2	27
new moone	31	11	12	first quarter	4	14	33
first quarter	8	0	58	full moone	11	6	42
full moone	16	0	38	last quarter	18	14	16
last quarter	23	1	15	new moone	26	16	0
new moone	1	23	58	first quarter	2	20	56
first quarter	9	22	9	full moone	9	15	34
full moone	17	14	40	last quarter	17	8	37
last quarter	24	8	28	new moone	25	4	46
new moone	31	13	56	first quarter	2	3	4
first quarter	8	17	18	full moone	9	3	50
full moone	15	23	52	last quarter	17	4	20
last quarter	22	15	30	new moone	24	16	52
new moone	30	5	0	first quarter	31	10	12
first quarter	8	9	0	full moone	7	19	28
full moone	15	8	15	last quarter	15	23	43
last quarter	21	23	24	new moone	23	4	17
new moone	29	20	33	first quarter	29	19	32
first quarter	6	21	29	full moone	7	13	46
full moone	13	15	30	last quarter	15	17	26
last quarter	20	9	54	new moone	22	22	44
new moone	28	11	50	first quarter	29	8	4

Almanacke for the year 1651. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
full moone	6	9	14	full moone	2	15	38
last quarter	14	8	34	last quarter	9	6	44
new moone	21	1	34	new moone	17	3	26
first quarter	28	23	40	first quarter	25	4	43
full moone	5	5	16	full moone	31	22	26
last quarter	12	20	29	last quarter	7	17	9
new moone	19	11	47	new moone	15	18	46
first quarter	26	18	0	first quarter	23	15	0
full moone	6	21	19	full moone	30	5	50
last quarter	14	5	6	last quarter	6	6	45
new moone	20	22	35	new moone	14	10	31
first quarter	28	13	18	first quarter	21	23	19
full moone	5	11	37	full moone	28	14	57
last quarter	12	11	33	last quarter	5	23	43
new moone	19	10	22	new moone	14	2	3
first quarter	27	8	0	first quarter	21	6	32
full moone	4	23	13	full moone	28	2	19
last quarter	11	17	2	last quarter	4	19	40
new moone	18	23	7	new moone	12	16	34
first quarter	27	1	14	first quarter	19	13	56
full moone	3	8	12	full moone	26	16	30
last quarter	9	23	0	last quarter	4	17	7
new moone	17	12	54	new moone	12	5	38
first quarter	25	16	56	first quarter	18	22	23
				full moone	26	9	8

The Golden number of this year is 16. The Dominical letter C. Romane Indiction 2. Epact 16. From the Nativite of Christ to Shrovesunday 7 weekes, 2 dayes. Quadagesima 21 of Februarie. Easter the 4 of Aprill. Ascension the 13 of May. Whitunday the 23 of May. Advent the 28 of November.

In this year there shall be seen 5 Eclipses, 2 in the Moone and 3 in the Sunne, whereoff the two in the Moone, & the middlemost in the Sunne shall be seen in our Horizon. The first in the Moone shall be upon the 26 of May, about 3 of the clock, 36 minutes, in the morning. The first of the Sunne shall happen the 9 of June without our Horizon. The 3 in the Sunne shall be seen of us the 4 of November about 3 of the clock, 9 minutes. The 4 in the Moone shall happen the 19 of November about 7 a clock, 34 minutes in the morning. The 5 in the Sunne shall be seen betwixt the 3 & 4 of December by them which dwell in the southpart of the World, about 12 of the clock, 53 minutes at midnight, without our sight.

The Golden number of this year is 17. The Dominical letter B. Romane Indiction 3. The Epact 27. From the Nativite of Christ to Shrovesunday nine weekes and 1 day. Quadagesima the 6 of March. Easter the 17 of Aprill. Ascension the 26 of May. Whitunday the 5 of June. Advent the 27 of November.

Four Eclipses come in this year, 2 of the Sunne and 2 of the Moone, whereoff the two in the Moone only shall be seen of us, the first in the Moone the 15 of May, about 8 of the clock, 41 minutes at night: the second in the Moone the 8 of November, about 7 houres 28 minutes in the morning. Both in the Sun shall fall without our Horizon, the first shall be seen in the southermost parts of America and in Peru, the other in the east of our Horizon in Indie extra Gangem and in Persien.

The Golden number of this year is 18. The Dominical letter A. Romane Indiction 4. The Epact 8. From the Nativite of Christ to Shrovesunday 8 weekes & 3 dayes. Quadagesima the 21 of Februarie. Easter the 9 of Aprill. Ascension the 18 of May. Whitunday the 28 of May. Advent the 3 of December.

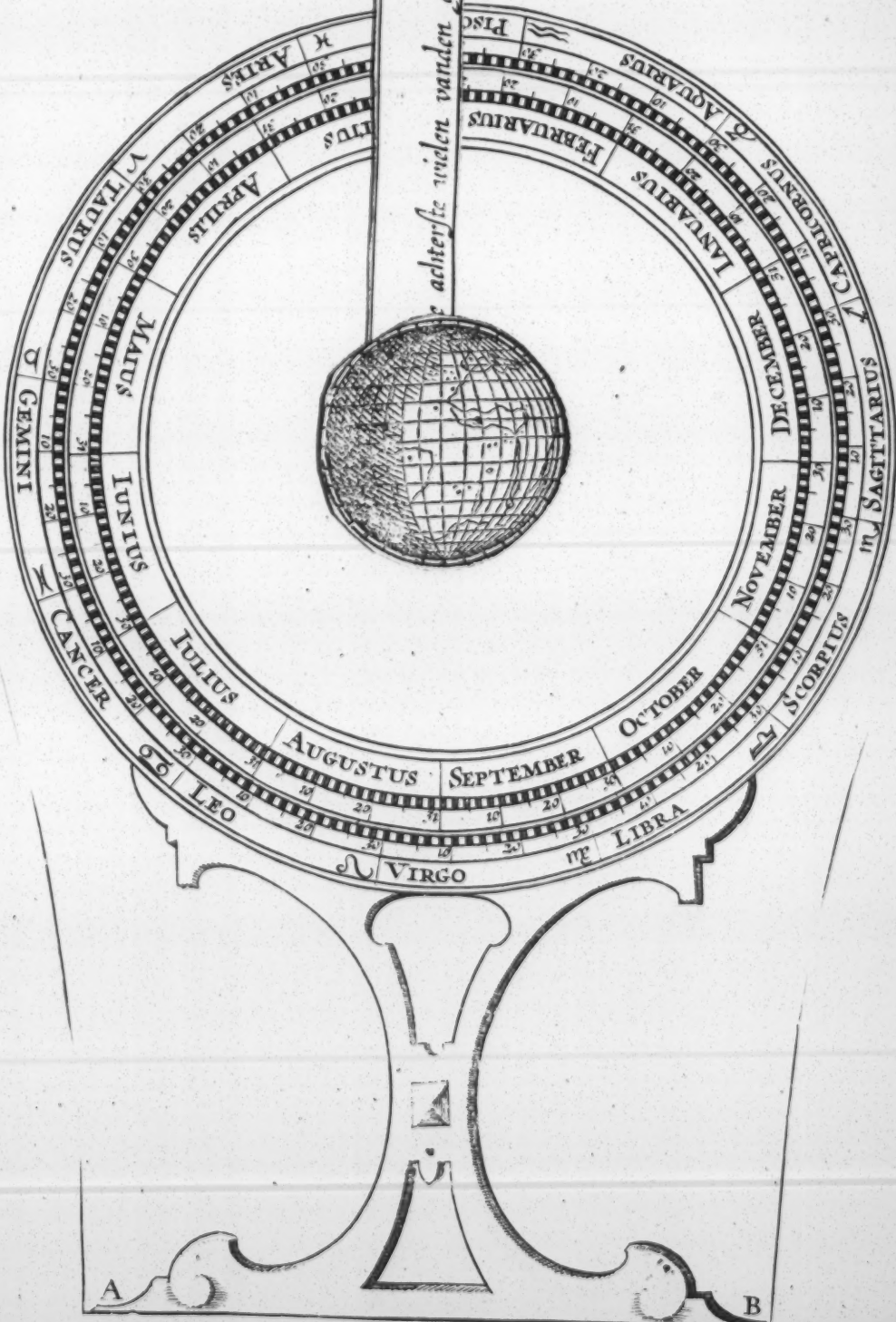
There shall fall out Eclipses in the Sunne, but nether of them both the first shall be seen of Aprill newe styll, and nine and two and one forty minutes, at ten a clock at night, and shall be seen in California Mexicana, a west sea about Tropicum Cancri. The second of October, at two of clock at after noon, and shall be seen in some places of Africa, in the souther part of the world. Eclipses in the Moone shall be so small, and because the over little; as if it were

C H A P. XXXIII.

For to finde the houre of the day and night.

The finding of the houre in all heights by day may be verie conveniently & surely done, by such an Equinoctiall Compas, as standeth figured out in the xxxi Chapter of the Tydes. By night it may wel be found by a Nightdiall, as this figure: which hath two round boards or plates, whereof the one is unmoveable, and the other moveable: upon the lower, which is unmoveable, stand the 12 signes of the Zodiack, against the monethes and dayes of the year. Upon the moveable, the houres: this turneth, with also a Pointer (the one right side whereof answereth right upon the middle point) about a nayle with a holl or pipe, where you may see through. The use of the Nightdyall is thus, you must set first the tooth of the twelfth houre on the moveable board or plate, on the day of the year upon the lowest unmoveable board or plate, & holde the Instrument on high, with the lowest edge of the foot A B right levell, so that you may see through the hole of the naile, the Northstarre, turning then the pointer upwards and downwards so long untill that the pointers of the Charles Wayne come to the pointer, that being so, the pointer shall then shewe on the moveable board or plate, the true houre. If in stead of the pointers of Charles Wayne you doe use the brightest of the Guardes, it shall be 4 houres 15 minutes later then the pointer shall shew, because that the aforesaid pointers of Charles Wayne doe goe so much time before the Guardes.

The houre may also be found by the right ascension of the Sunne and of the Starres, thus: when as you see any Starre in the south, whose right ascension is knownen, & you know also the right ascension of the Sunne, upon that day, you shall subtract the Sunnes ascension from the ascension of the Starre, that which remaineth thereof, devide into houres by 15, (for 15 degrees make an houre) which do



A L M A N A C K

Or Prognostication for the tyme of nine yeares following.

Almanacke for the yeare 1643. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
full moone	4	14	6	full moone	1	7	20
last quarter	12	19	10	last quarter	8	16	47
new moone	19	18	16	new moone	15	9	1
first quarter	26	10	52	first quarter	23	13	20
full moone	3	9	4	full moone	30	15	11
last quarter	11	10	54	last quarter	6	6	32
new moone	18	4	16	new moone	13	23	46
first quarter	25	0	42	first quarter	22	3	15
full moone	5	3	51	full moone	28	22	51
last quarter	12	22	43	last quarter	4	16	16
new moone	19	13	55	new moone	12	16	10
first quarter	26	16	32	first quarter	20	16	17
full moone	3	20	51	full moone	27	7	9
last quarter	11	6	57	last quarter	4	5	0
new moone	17	23	31	new moone	12	9	30
first quarter	25	9	45	first quarter	20	0	54
full moone	3	10	58	full moone	26	16	48
last quarter	10	12	57	last quarter	2	22	5
new moone	17	9	40	new moone	11	2	31
first quarter	25	3	43	first quarter	18	9	46
full moone	1	22	19	full moone	25	4	15
last quarter	8	18	4	last quarter	2	18	53
new moone	15	20	39	new moone	10	18	10
first quarter	23	21	16	first quarter	17	18	16
				full moone	24	18	0

The Golden number of this year is 10. The Circle of the Sun 28. Dominical letter D. Romane Indiction 11. The Epact 10. From the Nativitie of Christ to Shrovesunday 7 weekes 3 dayes. Quadagesima the 22 of Februarie. Easter the 5 of Aprill. Ascension day the 14 of May. Whitunday the 24 of May. Advent the 29 of November.

Four Eclipses shall befeen this year, 2 of the Sunne and 2 of the Moone, whereof the last of the Moone shall appeare with us. The other appeare without our Horizon, in the east parts of Asia, China, apon, and the east Ilands of Philippina.

Almanacke for the yeare 1644. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
last quarter	1	16	54	new moone	3	16	12
new moone	9	8	3	first quarter	11	11	14
first quarter	16	2	50	full moone	19	5	3
full moone	23	9	56	last quarter	26	1	36
last quarter	31	14	50	new moone	2	3	36
new moone	7	20	9	first quarter	10	4	40
first quarter	14	12	6	full moone	17	14	45
full moone	22	3	31	last quarter	24	7	5
last quarter	1	8	6	new moone	31	17	16
new moone	8	6	22	first quarter	8	21	14
first quarter	14	22	32	full moone	15	23	53
full moone	22	21	38	last quarter	22	14	48
last quarter	30	21	54	new moone	30	9	4
new moone	6	15	15	first quarter	8	12	20
first quarter	13	11	0	full moone	15	8	53
full moone	21	14	36	last quarter	22	1	52
last quarter	29	7	54	new moone	30	3	28
new moone	5	23	10	first quarter	7	14	2
first quarter	13	19	4	full moone	13	18	20
full moone	21	5	30	last quarter	20	17	14
last quarter	28	15	15	new moone	28	22	0
new moone	4	7	25	first quarter	6	13	22
first quarter	11	17	51	full moone	13	5	2
full moone	19	18	12	last quarter	20	12	15
last quarter	26	21	35	new moone	28	15	42

The Golden number of this year is 11. The Circle of the Sun 1. The Dominical letter C. B. Romane Indiction 12. The Epact 21. From the Nativitie of Christ to Shrovesunday 8 weekes and 2 dayes. Quadagesima the 14 of Februarie. Easter the 27 of March. Ascension the 1 of May. Whitunday the 11 of May. Advent the 27 of November.

Wee have in this year 2 Eclipses in the Sunne, the first shall happen the 8 of March newe stile, and shall befeen in the south parts of America, Peru, and there about. The 2 the 1 of September, and shall in some part appeare to our sight.

Almanacke for the yeare 1645. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
first quarter	4	23	0	full moone	8	12	34
full moone	11	17	21	last quarter	15	22	41
last quarter	19	9	40	new moone	22	14	28
new moone	27	7	36	first quarter	27	8	53
first quarter	3	7	5	full moone	7	1	30
full moone	10	7	28	last quarter	14	3	57
last quarter	18	7	0	new moone	21	0	17
new moone	25	21	5	first quarter	28	16	37
first quarter	4	14	35	full moone	5	13	27
full moone	11	22	51	last quarter	12	9	23
last quarter	20	2	20	new moone	19	12	40
new moone	27	7	42	first quarter	27	13	24
first quarter	2	22	34	full moone	5	0	20
full moone	10	13	40	last quarter	11	16	21
last quarter	18	18	20	new moone	19	3	40
new moone	25	16	12	first quarter	27	8	0
first quarter	2	8	40	full moone	3	10	14
full moone	10	6	48	last quarter	10	2	0
last quarter	18	6	47	new moone	17	21	18
new moone	24	23	25	first quarter	26	1	0
first quarter	31	19	34	full moone	2	20	34
full moone	8	22	5	last quarter	9	15	7
last quarter	16	16	0	new moone	17	16	38
new moone	23	6	16	first quarter	25	15	14
first quarter	30	9	10				

The Golden number of this year is 12. The Circle of the Sunne is 2. The Dominical letter A. Romane Indiction 13. Epact 2. From the Nativitie of Christ to Shrovesunday 9 weekes. Quadagesima the 5 of March. Easter the 16 of Aprill. Ascension the 25 of May. Whitunday the 4 of June. Advent the 3 of December.

In this year there shall befeen 4 Eclipses, 2 in the Sunne, & 2 in the Moone, the first in the Moone shall appeare the 10 of Februarie, at evening about 7 a clock, and shall continue 3 houres and 13 minutes. The second shall happen in the Sunne the 21 of August at noone, which both of them shall befeen of us. The other happen without our Horizon.

Almanacke for the yeare 1646. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
full moone	1	7	6	last quarter	5	14	7
last quarter	8	7	5	new moone	12	6	38
new moone	16	12	0	first quarter	19	2	32
first quarter	24	2	26	full moone	27	5	23
full moone	30	18	34	last quarter	3	23	0
last quarter	7	2	12	new moone	10	14	6
new moone	15	5	36	first quarter	17	16	10
first quarter	22	11	0	full moone	25	20	28
full moone	1	6	2	last quarter	2	6	7
last quarter	8	22	55	new moone	8	22	50
new moone	16	19	40	first quarter	16	9	10
first quarter	23	18	0	full moone	24	10	39
full moone	30	19	5	last quarter	1	12	48
last quarter	7	18	18	new moone	8	9	43
new moone	15	7	25	first quarter	16	4	55
first quarter	22	0	30	full moone	23	23	34
full moone	29	8	33	last quarter	30	19	57
last quarter	7	12	6	new moone	6	23	25
new moone	14	16	25	first quarter	15	1	55
first quarter	21	7	36	full moone	22	11	36
full moone	28	22	48	last quarter	29	4	40
last quarter	6	2	46	new moone	6	16	15
new moone	12	23	38	first quarter	14	21	44
first quarter	19	15	56	full moone	21	23	5
full moone	27	13	57	last quarter	28	15	14

The Golden number of this year is 13. The Dominical letter G. Romane Indiction 14. The Epact 13. From the Nativitie of Christ to Shrovesunday 6 weekes and 6 dayes. Quadagesima the 11 of Februarie. Easter the 1 of Aprill. Ascension the 10 of May. Whitunday the 20 of May. Advent the 2 of December.

Four Eclipses come in this year, two of the Sunne & two of the Moone, whereoff the first in the Moone only shall befeen with us and shall appeare the 30 of Ianuarie 18 houres 6 minutes, & shall continue one houre 55 minutes, all the other shall befeen without our Horizon.

Almanacke for the yeare 1647. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
new moone	5	11	25	new moone	1	23	44
first quarter	13	14	30	first quarter	8	14	35
full moone	20	9	55	full moone	16	6	17
last quarter	27	4	20	last quarter	24	9	27
new moone	4	6	40	new moone	31	7	14
first quarter	12	4	2	first quarter	8	12	43
full moone	18	19	56	full moone	14	21	45
last quarter	25	19	12	last quarter	22	21	21
new moone	6	1	22	new moone	29	14	36
first quarter	13	14	0	first quarter	5	10	20
full moone	20	6	12	full moone	13	13	53
last quarter	27	14	18	last quarter	21	7	30
new moone	4	16	45	new moone	27	22	48
first quarter	11	21	33	first quarter	5	14	8
full moone	18	16	20	full moone	13	6	0
last quarter	26	9	7	last quarter	20	16	18
new moone	4	5	13	new moone	27	8	52
first quarter	11	3	18	first quarter	3	21	0
full moone	18	3	29	full moone	11	21	38
last quarter	26	3	14	last quarter	19	0	22
new moone	2	15	38	new moone	25	21	32
first quarter	9	8	32	first quarter	3	18	24
full moone	16	16	2	full moone	11	12	8
last quarter	24	19	32	last quarter	18	8	18
				new moone	25	13	7

The Golden number of this year is 14. The Dominical letter F. Romane Indiction 15. The Epact 24. From the Nativitie of Christ to Shrovesunday 9 weekes and 5 dayes. Quadagesima the 10 of March. Easter the 21 of Aprill. Ascension the 30 of May. Whitunday the 9 of June. Advent the first of December.

Four Eclipses shall befeen this year, three of the Sunne and one of the Moone, whereoff that in the Moone only shall befeen in our Horizon.

Almanacke for the yeare 1648. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
first quarter	2	15	49	full moone	4	11	37
full moone	10	1	12	last quarter	12	9	48
last quarter	16	27	53	new moone	19	22	54
new moone	24	6	46	first quarter	26	15	25
first quarter	1	11	13	full moone	2	23	35
full moone	8	12	22	last quarter	11	12	30
last quarter	15	3	49	new moone	18	7	18
new moone	23	1	12	first quarter	24	22	5
first quarter	2	3	16	full moone	1	14	12
full moone	8	21	56	last quarter	9	17	50
last quarter	15	17	42	new moone	16	15	24
new moone	23	19	0	first quarter	23	7	50
first quarter	31	15	23	full moone	1	6	37
full moone	7	6	34	last quarter	9	7	18
last quarter	14	7	27	new moone	15	23	56
new moone	22	11	7	first quarter	22	21	5
first quarter	29	23	58	full moone	31	0	30
full moone	6	15	7	last quarter	6	18	43
last quarter	13	3	37	new moone	14	8	12
new moone	22	1	11	first quarter	21	14	56
first quarter	29	5	46	full moone	29	18	38
full moone	5	0	20	last quarter	7	4	22
last quarter	12	16	42	new moone	13	21	46
new moone	20	12	56	first quarter	21	10	34
first quarter	27	10	25	full moone	29	11	30

The Golden number of this year is 15. Dominical letter E D. Romane Indiction 1. The Epact. 5. From the Nativitie of Christ to Shrovesunday 8 weekes 4 dayes. Quadagesima the first of March. Easter the first of Aprill. Ascension the 21 of May. Whitunday the 31 of May. Advent the 29 of November.

Four Eclipses shall befeen this year, two of the Moone, and two of the Sunne, whereoff only the last in the Moone shall befeen in the climats the 30 of November, about 6 of the clock, 38 minutes in the morning, and shall continue 3 houres, 6 minutes.

Almanacke for the year 1649. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
last quarter	5	4	22	last quarter	1	6	27
new moone	12	12	45	new moone	9	8	44
first quarter	20	8	30	first quarter	16	12	40
full moone	28	1	50	full moone	23	7	52
last quarter	3	20	52	last quarter	30	23	34
new moone	11	2	48	new moone	7	20	18
first quarter	19	5	40	first quarter	14	17	54
full moone	26	13	39	full moone	21	18	46
last quarter	3	5	34	last quarter	29	17	58
new moone	12	19	6	new moone	6	6	32
first quarter	20	23	52	first quarter	12	23	56
full moone	27	23	14	full moone	20	7	50
last quarter	3	15	16	last quarter	28	12	0
new moone	11	15	52	new moone	5	16	14
first quarter	19	13	20	first quarter	12	8	15
full moone	26	7	28	full moone	20	0	10
last quarter	3	2	20	last quarter	28	4	41
new moone	11	4	12	new moone	4	2	2
first quarter	19	0	3	first quarter	20	19	0
full moone	25	15	0	full moone	18	19	0
last quarter	1	15	33	last quarter	26	19	10
new moone	9	19	20	new moone	3	12	21
first quarter	17	7	10	first quarter	10	9	42
full moone	23	22	34	full moone	18	14	31

Almanacke for the year 1650. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
new moone	1	23	0	first quarter	6	7	9
first quarter	9	4	6	full moone	12	22	22
full moone	17	8	52	last quarter	19	22	20
last quarter	24	17	6	new moone	28	2	27
new moone	31	11	12	first quarter	4	14	33
first quarter	8	0	58	full moone	11	6	42
full moone	16	0	38	last quarter	18	14	16
last quarter	23	1	15	new moone	26	16	0
new moone	1	23	58	first quarter	2	20	56
first quarter	9	22	9	full moone	9	15	34
full moone	17	14	40	last quarter	17	8	37
last quarter	24	8	28	new moone	25	4	46
new moone	31	13	56	first quarter	2	3	4
first quarter	8	17	18	full moone	9	3	50
full moone	15	23	52	last quarter	17	4	20
last quarter	22	15	30	new moone	24	16	52
new moone	30	5	0	first quarter	31	10	12
first quarter	8	9	0	full moone	7	19	28
full moone	15	8	15	last quarter	15	23	43
last quarter	21	23	24	new moone	23	4	17
new moone	29	20	33	first quarter	29	19	32
first quarter	6	21	29	full moone	7	13	46
full moone	13	15	30	last quarter	15	17	26
last quarter	20	9	54	new moone	22	22	44
new moone	28	11	50	first quarter	29	8	4

Almanacke for the year 1651. New stile.

Moone.	da.	ho.	mi.	Moone.	da.	ho.	mi.
full moone	6	9	14	full moone	2	15	38
last quarter	14	8	34	last quarter	9	6	44
new moone	21	1	34	new moone	17	3	26
first quarter	28	23	40	first quarter	25	4	43
full moone	5	5	16	full moone	31	22	26
last quarter	12	20	29	last quarter	7	17	9
new moone	19	11	47	new moone	15	18	46
first quarter	26	18	0	first quarter	23	15	0
full moone	6	21	19	full moone	30	5	50
last quarter	14	5	6	last quarter	6	6	45
new moone	20	22	35	new moone	14	10	31
first quarter	28	13	18	first quarter	21	23	19
full moone	5	11	37	full moone	28	14	57
last quarter	12	1	33	last quarter	5	23	43
new moone	19	10	22	new moone	14	2	3
first quarter	27	8	0	first quarter	21	6	32
full moone	4	23	13	full moone	28	2	19
last quarter	11	17	2	last quarter	4	19	40
new moone	18	23	7	new moone	12	16	34
first quarter	27	1	14	first quarter	19	13	56
full moone	3	8	12	full moone	26	16	30
last quarter	9	23	0	last quarter	4	17	7
new moone	17	12	54	new moone	12	5	38
first quarter	25	16	56	first quarter	18	22	23

The Golden number of this year is 16. The Dominicall letter C. Romane Indiction 2. Epact 16. From the Nativitie of Christ to Shrovesunday 7 weekes, 2 dayes. Quadagesima 21 of Februarie. Easter the 4 of Aprill. Ascension the 13 of May. Whitunday the 23 of May. Advent the 28 of November.

In this year there shall be seen 5 Eclipses, 2 in the Moone and 3 in the Sunne, whereoff the two in the Moone, & the middlemost in the Sunne shall be seen in our Horizon. The first in the Moone shall be upon the 26 of May, about 3 of the clock, 36 minutes, in the morning. The first of the Sunne shall happen the 9 of June without our Horizon. The 3 in the Sunne shall be seen of us the 4 of November about 3 of the clock, 9 minutes. The 4 in the Moone shall happen the 19 of November about 7 a clock, 34 minutes in the morning. The 5 in the Sunne shall be seen betwixt the 3 & 4 of December by them which dwell in the southpart of the World, about 12 of the clock, 53 minutes at midnight, without our sight.

The Golden number of this year is 17. The Dominicall letter B. Romane Indiction 3. The Epact 27. From the Nativitie of Christ to Shrovesunday nine weekes and 1 day. Quadagesima the 6 of March. Easter the 17 of Aprill. Ascension the 26 of May. Whitunday the 5 of June. Advent the 27 of November.

Four Eclipses come in this year, 2 of the Sunne and 2 of the Moone, whereoff the two in the Moone only shall be seen of us, the first in the Moone the 15 of May, about 8 of the clock, 41 minutes at night: the second in the Moone the 8 of November, about 7 houres 28 minutes in the morning. Both in the Sun shall fall without our Horizon, the first shall be seen in the fourthermost parts of America and in Peru, the other in the east of our Horizon in Indie extra Gangem and in Persien.

The Golden number of this year is 18. The Dominicall letter A. Romane Indiction 4. The Epact 8. From the Nativitie of Christ to Shrovesunday 8 weekes & 3 dayes. Quadagesima the 21 of Februarie. Easter the 9 of Aprill. Ascension the 18 of May. Whitunday the 28 of May. Advent the 3 of December.

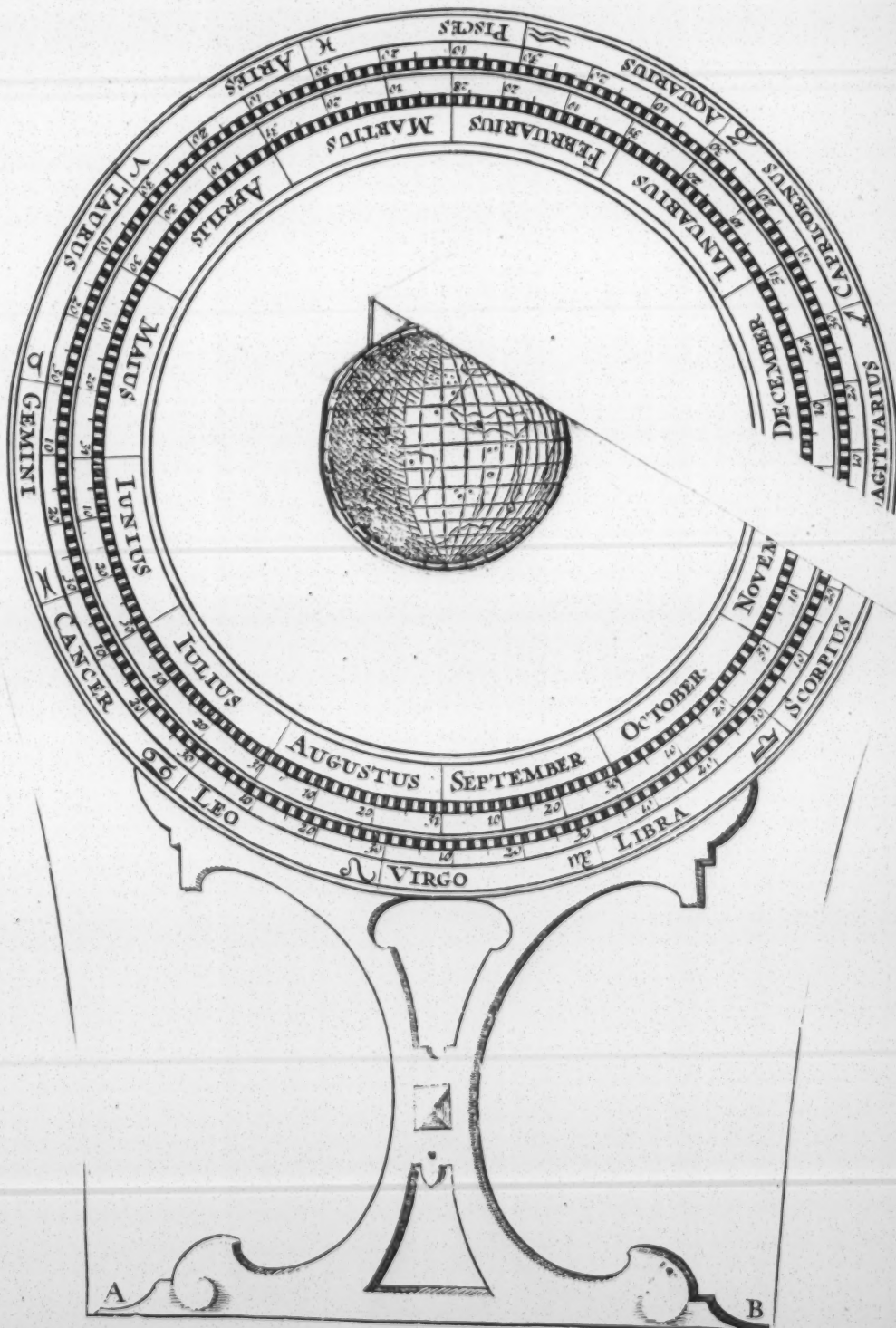
There shall fall out two Eclipses in the Sunne, but nether of them both, shall be seen in our Horizon: the first shall be on the nineteene of Aprill newe styll, and nine and twenty old styll, at ten a clock at night and oneforty minutes: and shall be seen in California Mexicana, and in the west sea about Tropicum Cancr. The second in the Sunne, shall be one the fourteene of October newe styll; or the four and twenty of October old styll, at two of clock at after noone and three minutes, & shall be seen in some places of Africa, about Cabo Verde, in Brasill in the fourther parts of America and Peru. As for the Eclipsis in the Moone they shall not be seen of any, because the over shawdow shall be so small, and litle; as if it were no Eclipsis at all.

C H A P. XXXIII.

For to finde the houre of the day and night.

The finding of the houre in all heights by day may be verie conveniently & surely done, by such an Equinoctiall Compas, as standeth figured out in the xxxi Chapter of the Tydes. By night it may wel be found by a Nightdiall, as this figure: which hath two round boards or plates, whereof the one is unmoveable, and the other moveable: upon the lower, which is unmoveable, stand the 12 signes of the Zodiack, against the monethes and dayes of the year. Upon the moveable, the houres: this turneth, with also a Pointer (the one right side whereof answereth right upon the middle point) about a nayle with a holl or pipe, where you may see through. The use of the Nightdiall is thus, you must set first the tooth of the twelfth houre on the moveable board or plate, on the day of the year upon the lowest unmoveable board or plate, & holde the Instrument on high, with the lowest edge of the foot A B right levell, so that you may see through the hole of the naile, the Northstarre, turning then the pointer upwards and downwards so long untill that the pointers of the Charles Wayne come to the pointer, that being so, the pointer shall then shewe on the moveable board or plate, the true houre. If in stead of the pointers of Charles Wayne you doe use the brightest of the Guardes, it shall be 4 houres 15 minutes later then the pointer shall shew, because that the a foresaid pointers of Charles Wayne doe goe so much time before the Guardes.

The houre may also be found by the right ascension of the Sunne and of the Starres, thus: when as you see any Starre in the south, whose right ascension is known, & you know also the right ascension of the Sunne, upon that day, you shall subtract the Sunnes ascension from the ascension of the Starre, that which remaineth thereof, divide into houres by 15, (for 15 degrees make an houre) which do



shew the right houre of that time. If the Sunnes ascension be more then the Starres ascension, in such case you shall adde 360 degrees to the ascension of the Starre, and then doe as is abovesaid.

1 Example.

Vpon the tenth of Aprill in the evening, I see in the south the Lyons heart, whose right ascension is 147 degrees. The Sunnes right ascension upon that day is 19 degrees, which being deducted from the ascension of the Starre, there remaineth 128 degrees, which being devided by 15, I finde 8 houres and 8 degrees remaining over, and seeing 15 degrees make one houre, therefore everie degree maketh 4 minutes, the remaining 8 degrees, make 32 minutes of an houre, it shall then be late at that time 8 of the clock 32 minutes, to reckon of from the noone.

2 Example.

Vpon the five of November in the night, I finde in the

A Table of the right Ascension of the Sunne.

The first number of ciphers sheweth the day of the moneth, the second the degrees of the Ascension of the Sunne upon that day.

Januarie.	Februarie.	March.	Aprill.
dayes. degr.	dayes. degr.	dayes. degr.	dayes. degr.
5-287	5-319	5-346	5-14
10-292	10-324	10-351	10-19
15-297	15-329	15-355	15-24
20-303	20-334	20-360	20-28
25-308	25-339	25-4	25-33
31-314	28-342	31-10	30-38
May.	June.	Iulie.	August.
dayes. degr.	dayes. degr.	dayes. degr.	dayes. degr.
5-42	5-73	5-104	5-335
10-47	10-78	10-109	10-140
15-52	15-83	15-114	15-145
20-57	20-88	20-119	20-149
25-62	25-94	25-124	25-154
31-68	30-99	31-130	31-159
Septemb.	October.	Novemb.	Decemb.
dayes. degr.	dayes. degr.	dayes. degr.	dayes. degr.
5-164	5-191	5-220	5-251
10-168	10-195	14-225	10-275
15-173	15-200	15-231	15-263
20-177	20-205	20-236	20-268
25-182	25-210	24-241	25-274
30-187	31-215	30-246	31-281

south the Starre *Aldebaran*, the souther eie of the Bull, whose right ascension is 64 degrees, the Sunnes right ascension upon that day is 220 degrees, the which is more then that of *Aldebaran*, therefore I adde to the ascension of the Starre 360 degrees, which make 424 degrees, from which being deducted the Sunnes right ascension 220, there remaineth 204 degrees, for the difference of time betweene the Sunne and the Starre aforesaid, which being devided by 15, there commeth 13 houres and 9 degrees remaining, which make 36 minutes, it is then 13 houres and 36 minutes from the noone, that is one of the clock, 36 minutes after midnight.

For to finde the right ascension upon everie day of the yeare, as well of the Sunne as of the Starres, we have hereunto annexed two Tables, the one of the Sunne, shewing from five dayes to five the Sunnes right ascension, whereby the other foure dayes betweene them are easily to be found. The other for 30 of the most notable fixed Starres, both onely by degrees, the same being enough to suffice for this purpose.

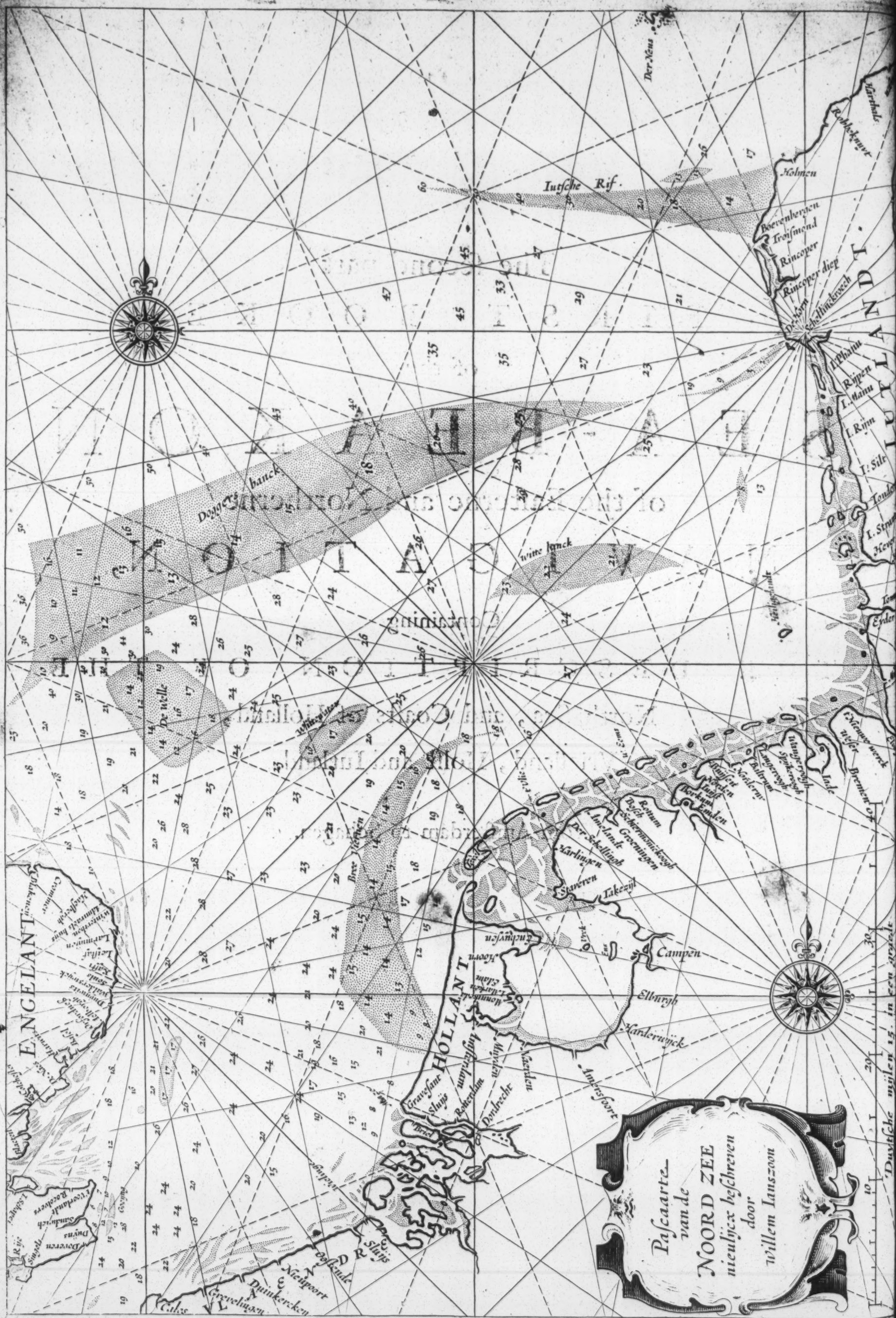
A Table of the right Ascension of 30 of the most notable fixed Starres.

The gridle of <i>Andromeda</i> .	degr.
The brightest in the head of the Ramme.	12
The brightest in the mouth of the Whale, <i>Menkar</i> .	27
The souther eye of the Bull, <i>Aldebaran</i> .	41
The left shoulder of <i>Erichtonius</i> , <i>Capella</i> .	64
Orions left foot, <i>Regel</i> .	72
Orions left shoulder.	74
The great Dogge, <i>Syrus</i> .	84
The norther head of the Twins.	97
The souther head of the Twins.	108
The little Dogge, <i>Procyon</i> .	111
The brightest of the Waterserpent, <i>Cor Hydra</i> .	110
Lyons heart, <i>Regulus</i> .	137
Lyons tayle.	147
The right wing of the Virgin, <i>Vindemiatrix</i> .	172
<i>Virginis Spike</i> .	191
The brightest in Bootes, <i>Arcturus</i> .	196
South Ballance.	210
North Ballance.	218
The brightest of the norther Crowne.	224
Scorpions heart, <i>Antares</i> .	230
Hercules head.	242
Serpent beares head.	254
Eagles tayle.	259
The brightest in the Eagle, <i>Vultur</i> .	282
The mouth of the Horse Pegasus.	293
The bright Starre in the end of the water of Aquarius	321
<i>Fomahant</i> .	339
The shaft of Pegasus, <i>Marcab</i> .	342
The outermost in the wing of Pegasus.	358
The northermost in the Whales tayle.	360

E N D E.

The second part
F I R S T B O O K E
of the
S E A - B E A K O N
of the Easterne and Northerne
N A V I G A T I O N,
Containing
T H E D E S C R I P T I O N O F T H E
North Sea, and Coasts of Holland,
Vriesland, Holst and Iutland.

From Amsterdam to Schagen.



The H
bbe.

THE FIRST BOOKE of the EASTERNE AND NORTHERNE NAVIGATION,

Conteyning the Description of the North Sea, from Amsterdam
unto the Scaw or Schagen.

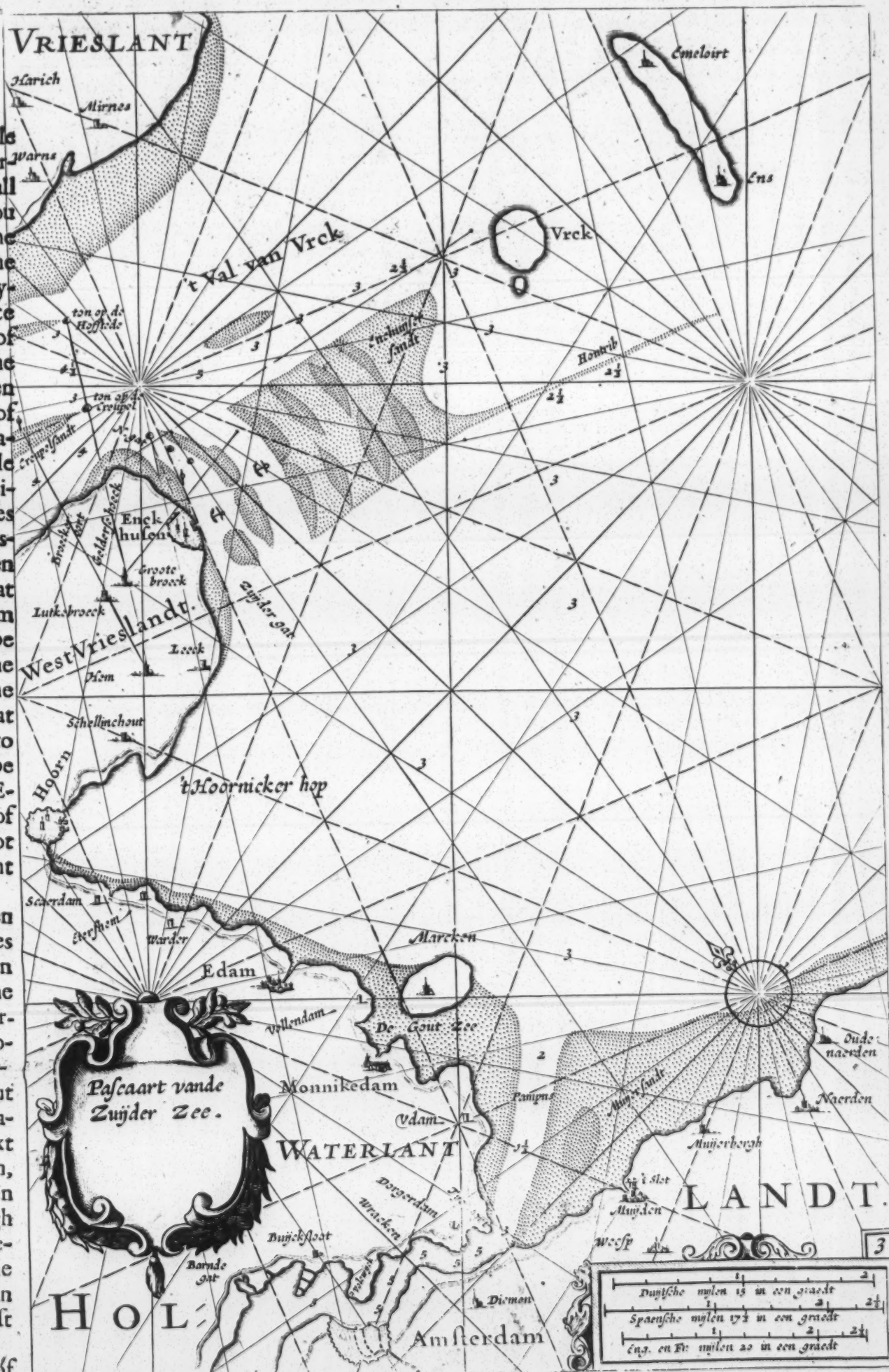
CHAP. I. Of the Flie streame.

FOR to saile from Amsterdam to the Fall of Vreck, you must keepe the middle of the channell in sayling to Tyoort, and from thence over Pampus, with a shippe of great draught, that draweth tenne foot or more, keepe Marcken church without to the land of Vdam, called Schyteldoecks haven, so lang until that the steeple of Zuyderwouw come past Kinnigherbuert, which are the houses half waies betwixt Schiteldoecks haven and Durgerdam goe then towards the land east, untill that the New church of Amsterdam come about Durgherdam, keepe that so standing untill that the church of Weesp be come past the House or Castle at Muyen, so that it doe stand somewhat nearer to Muyen then to the House, keepe Weesp standing so, untill that Edam come without the east end of Marken. In this farewaie it is a foot deeper, then if you sayled right through.

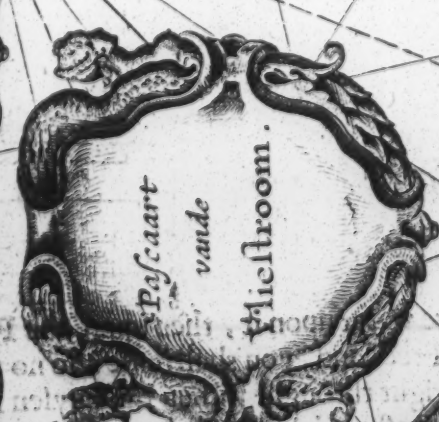
For to avoyd Muyen sand: men were wont to bring the houses which were wont to stand upon Toort to the southwards of the Heyligher-stee at Amsterdam, thereby you can make some reckoning, they are good longh markes: when Monnickedam is about the west end of Schyteldoecks haven, & the house at Muyen betwixt Weesp and the church at Muyen, then are you thwart of Muyen sand. For to saile right through over Pampus, then keepe the steeple of Diemen over or about the point of Tyoort, so long as you can see Tyoort, that is a right longht marke for to faile over Pampus.

When you are come thwart of the east end of Marcken, goe then ont northeast, or somewhat more easterly towards the Fall of Vreck, which is seven leagues: when you are come within a great league of Vreck, you shall meete with a hard sand, called the Houtribbe, lying southeast and northwest thwart over the Farewaie,

there is no more water upon it, then upon the Flat of Wieringhen, or of Freesland, you shall finde also no deeper water there then right through. When Enchuyzen lyeth north west and northwest and by west from you, then you are upon the Houdtribbe. Before that you come against the sand,

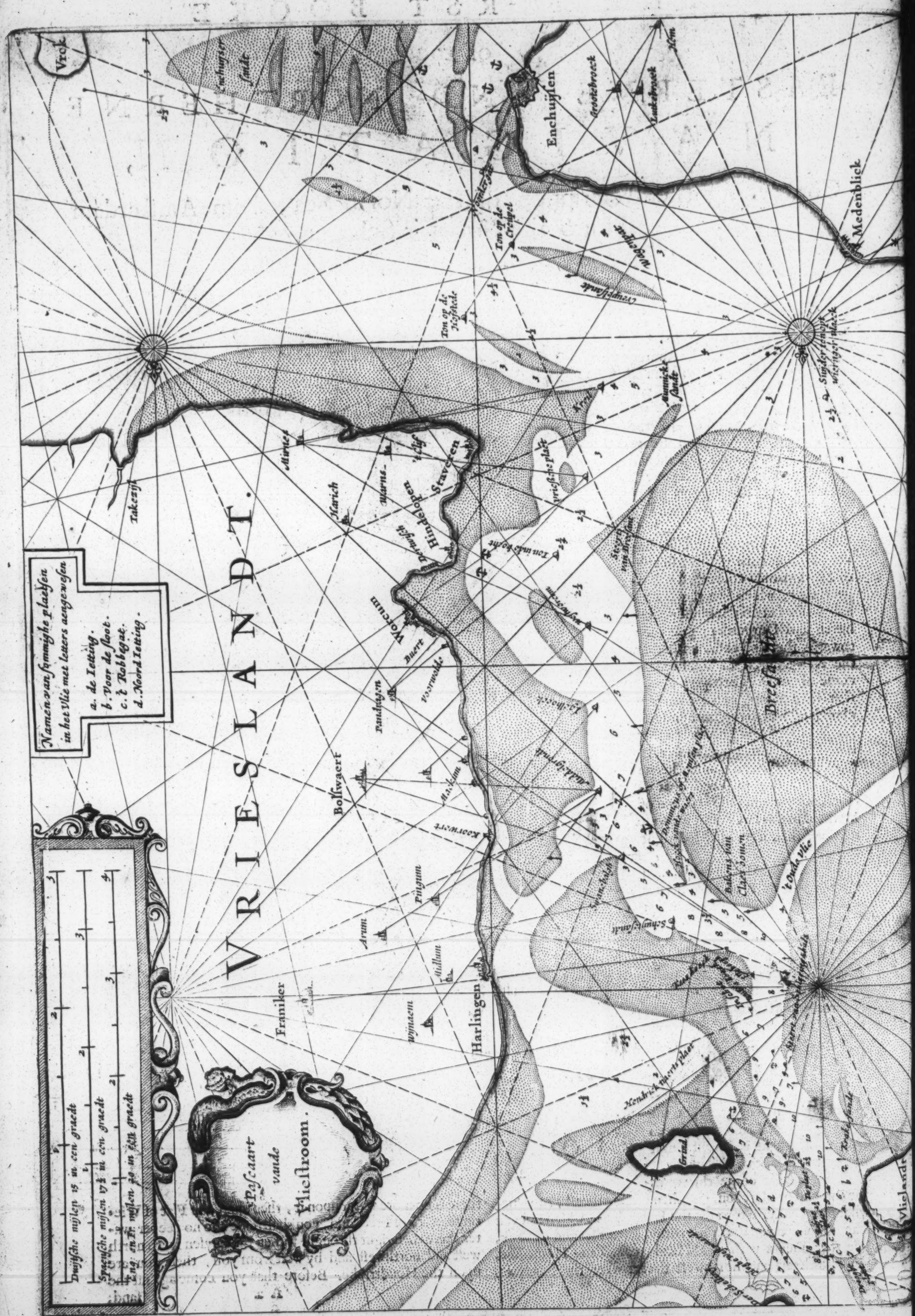


Duytsche mijlen 15 in een graede
 Spaensche mijlen 17½ in een graede
 Eng. en Fr. mijlen 20 in een graede



VRIESLANDT.

Namen van sommige plaatsen
 in het Vlie met letters aengewesen
 a. de Ietting.
 b. Voor de sloot.
 c. t. Robbegat.
 d. Noord Ietting.



land, you can by night see the fire upon Vrck. When that Vrck or the fire is more northerly then north-east from you, and that you get shoulding, then that is certainly of the Houdtribbe: for so you cannot come to near the Enchuyfen sand. When you come from the southwards, you are not about the Enchuyfen sand before that the Church upon Vrck come without the little village of houses, which is then east and by south and eastsoutheast from you: if that then you goe awaie northwest and by west or westnorthwest, you shall runne close alongst by the side of the sand. With a shippe of great draught, bring the church a good waies through the houses, untill that it stand eastsoutheast from you, then goe bouldly on northwest and by west, or keepe Medenblick without the point of the Ven, and so you shall not come to neare, neither to sand nor showld. Likewise if you come from the northwards, & bring Vrck not more easterly then eastsoutheast from you, then you cannot take hurt also of the Enchuyfen sand. From Vrck to the buyes upon the Gripple & Hofftede, the course is northwest and by west, with that course you may runne all alongst unto the souther buy upon Wieringen Flat: in turning to windwards you may wel bring Medenblick a little within the point of the Ven, but when Medenblick is without it, then you are in the right farewaie.

Between Vrck and the buy upon the Hofftede northeast somewhat easterly from the steeple of Enchuyfen lyeth a little plate of hard sand, lying towards the end of Enchuyfen sand, which is not deeper then the Frees Flat, about to the eastwards of it, is the deepest water, but about to the westwards of it, (by some called the Kattegat) you shall be sooner about the High horne, or the Enchuyfen sand, and it is good for ships that draw but little water.

The thwart markes of the buyes, both upon the Cripple and Hofftede, are Grootebroeck & Hem (two sharpe steeples) right one in the other, and Warnis a littlesharpe steeple in Freeland to the south side of the Cliffe of Staverne, then you have the length of these buyes, which lie each of them in three fathome, the one on the east shoare, and the other on the west shoare upon the tayle of the Cripple. There is in the right fareway, two foot lesse then five fathome, and soft ground. When the steeple of Medenblick commeth to the northwards of the house of Medenblick, so farre as the house is broad, then you are cleare of Cripplesand, and past it; goe then on northwest, and northwest and by north to the buy upon the Creyl, according as the wind and tyde shall be, the right farewaie there, is deep five fathome scarce. Thwart of the Creyl in sailing out, or about the Creyl in sailing in, that is a little within the Creyl on the north shoare, lyeth alongst the reach (towards the buie upon the Hoffteede) a hard sand or place called the South Creyl, upon which there is no more then twelve foot water, at low water, betwixt that banck and the north shoare it is three fathome deep and soft ground, and to the southwards or the westwardes of it four fathome and an half. When Mirnes a little flatte steeple in Freeland commeth over a long cuntrye house to the southwards of the cliffe of Staverne, then you come right thwart of that foresaid plate.

The markes of the buie upon the Creyl, are the sharp steeple of Twisck over the Cornemill to the westwards of Medenblick, and that little flat steeple of Mirnes to the south side or east side of the Cliffe. The right farewaie there is four fathome & an halfe & five fathome deep, soft ground; the buie lyeth in four fathome, if need require, men may run wel a cables length about to the eastwards of it. From the buye upon the Creyl to the buie upon the Freese plate the course is north and by east: when the steeple of Twisck commeth a little to the northwards of Medenblick, then keepe them so standing, so long as you can see it, and then you shall not faile within any showldes betwixt that plate & the Creyl.

Between the buie upon the Creyl and the Freese plate on the west shoare, alongst the Reach, lyeth a hard sand called Monick sand, which men may befoul of, if they runne somewhat to farre over to the westwards.

When you are come about the Creyl, you may goe on north and by east (with a ship that draweth but little water) over the tayle of Broad-sand, right to the buye upon the sand called Westworckum, but with ships of great draughts you must keep the right farewaie. For to finde the deepest water upon the flat: bring Pandragen a little flatte steeple (standing to the Westwards of Worckum) to the westwards of a little village, which standeth also to the westwards of Worckum, and saile so right with it, that is a good long marke of the buye upon the Freese plate, and so you shall runne right with the buye, when as that Warnes and Mirnes come one in the other to the northwards of Staveren, then you have the length of the buye, which lieth on the West-side of the Plate, you must runne alongst to the westwards of it, there is the deepest water: when you come from the northwards, you may saile within the Freeseplate on the east shoare.

Being past the foresaid buye upon the plate, goe on north-northeast, untill that Pandraghen come betwixt the little village and Voorwolde. If that you have then the cliffe through Staveren, then you have the deepest water upon the showldest of the flatte, then men runne commonly a little more northerly unto the buye in the Bight, and alongst to the westwards of it, which lyeth right in the farewaie, in sixteene foot, but alongst to the eastwards of the buye is the deepest water, the farther into the Bight towards Freeland the deeper. The marke of this buye, is the little flatte steeple of Mirnes on to the southwards of Molqueren. Bring that fore said little flat steeple in Molqueren, and keepe it so standing, and then you come in the farewaie of the Buye of Westworckum, that is a verie good marke, when the buyes are taken waie.

The old thwart markes of the buye in the Bight, are Mirnes, Molqueren, Hemelum and a little long village, when they stand in four parts. Between the buyes upon the Freese plate, and in the Bight is the showldest of the flat. When the buye in the Bight is on your broad side, then go on north and by west, somewhat more westerly unto the buye of Westworkum, which lyeth on the eastshore in 16 foot at low water, upon these marks: a little sharpe steeple far within the land called Harich, commeth over a little village to the northwards of Hinlopen, called Dertwisch, the right deep thwart of it is three fathom. The old markes are two villages next to Mackum, upon the water side, standing n. e. off from it, when these stand a little asunder one from the other, you see yet two little steeples somewhat to the northwards of Bollswaert, almost one to the other near about as the other upon the waterside stand asunder; the one is called Idsegahuyfen. The thwart markes are a high house on the east end of Coudom, that commeth within a capstone barres length to the south end of Hinlopen. From thence to the buye upon Ygelhoeck, the course is north, the markes there of are, a little sharpe steeple with the first long Village to the northwardt of Workum called Geest, when that little steeple commeth in the innermost swampe of that long village, then you have the buye, that is a good thwart marck: the longest marks are, the sharp steeple of Pingom over the flat steeple of Coorenwaert upon the water side, and Pandragen to a little house to the northwardes of the village with the swamp, or when the mil of Staveren standeth betwixt the town and the Blockhouse of Staveren, these are al good longe marks of the buye upon Yghelhoeck.

From Ygelhoeck to the Middleground the course is north, the right deepe in the Middleground is seven fathom. In the farewaie betwixt Westworckum and Yghelhoeck the right deep is four fathom, soft ground, the east shore is flat, and the west shoare steepe. The buye of the Middleground lieth upon these marks: the two sharpe steeples Arum and Pingom one in the other about northeast from you: or Bollswert right to the northwards of a Cuntrye house, to the northwardes of Mackum, these are good thwart marks of the Middleground. The longest marks are Kinswaert (that is the runner) commeth behind the church of Surich when you are right in the farewaie. The Church of Surich standeth upon the water side, upon a point that lyeth out

Marks of Enchuyfen sand.

Marks of the buyes upon the Hofftede & Cripple.

the Creyl.

South Creyl.

Marks of the Creyl.

Freese plate.

Monick sand.

Buye in the Bight.

Buy of Westworkum.

Ygelhoeck.

Middleground.

about northeaft and by north from the buye, or when the flatte fteeples of Wynaem (to the northwards of Harlinghen) commeth betwixt Midlum and the east end of Harlinghen, then you are right in the Middleground, on which fide that Wynaem standeth neareft, that shore you are also neareft unto, the west shore is fteepe, the east shoare indifferent flatte, you may runne over it in three fathome, and come againe in five fathome towards Friesland. From the Middleground outwards to the Flie, you can fail within no tailes of sands on the west shore.

Swane-
balgh.

Being past the buye in the Middleground, then goe on northnorthwest unto the buye upon Swanebalgh, which lieth in three fathome on the east shore, the thwart markes thereof are Bolswaert over a little short house to the southwards of Cornwaert. When you runne over betwixt the buyes of the Middleground and Swanebalgh on the east shoare more easterly then in three fathome, that you come againe in four or five fathom, you might (in failing out) fail behind the shoulds of Swanebalgh or when you are bound in, behind the showlds of the Middleground, the west shoare thwart of this, you may found in four fathom, or three fathom and a half; over against the buye upon Swanebalgh, on the west shore is good ground for to ancker in.

Schuyte-
sand.

From the buye upon Swanebalgh to the buye upon Schuytesand the course n. w. somewhat northerly: the thwart markes thereof are, Wynaem over the highest part of Harlinghen: the longest marks are, bolswaert to the northwards of the Sluys which lyeth to the northwardes of Woens: this buy lieth in six fathom on the east shore, upon a taile or point, which you might faile within when you faile out, the right deepe thwart of it is seven and eight fathom, the west shore is indifferent flat, which you may found in four fathome, the east shore is fteepe, but a little without the buye it is flat all alongft to Keeshoeck, and you may found it all alongft unto the Sloot, in fayling up, you might faile within the west shoare over against Schuytesand, or a little to the southwards of it in three fathom or three fathom and a halfe into a Deadbalgh, behinde a tayle of sand, called the point of the Waerdt, but keeping in 4 fathom from that shore, you cannot take hurt of it. In failing up with a fooflood, keep the east shore, or els you should be lightly carried therewith into the foresaid balgh, behind that Waerdt, before you should be aware of it. Vpon the point of that Waerdt standeth a driftbeacon & two to the northwards or the westwardes of it, which men do call the beacons of Claefoornen, & to the southwards of it standeth a beacon upon Dominicusplate, or (as the Pilots do name it) Meynsen plate. The marks for to fail alongft this long reach are, Mackum with a mill upon the water fide, & a village with a little flat fteeples to the southwards of Mackum called Idsegahuyfen, when Pandaghen commeth betwixt Mackum and that village, then you are too near the foresaid taile or plate, or if Pandaghen come neareft to Mackum, then you are too neare the east shore.

Point of the
Waerdt.

Keeshoeck.

From Schuytesand to the buye upon Keeshoeck, the course is westnorthwest, or northwest and by west, according as the winde and tyde shall be. In that long reach goe little more then half tydes alongft the deep, the afterflood and fore ebbe fall thwart over there to the westwardes, and the after ebbe and fore floude right contrarie to the eastwards. The markes of the buye upon Keeshoeck, are Franicker fteeples betwixt the mill and the towne of Harlinghen, or to the mastes of the shippes which lie in the haven.

This buye lieth on the east shore, the right farewaie thwart of it is eight, nine, and ten fathome deepe.

Betwixt Keeshoeck and Schuytesand, or betwixt the beacons of Claefoornen & the point of the Water lieth a little narrowe plate alongft the reach, almost in the midst of the farewaie neareft to the west shoare, whereupon it is not deeper then four fathome, or three fathome and an halfe, when men turne to windwards they are over it with two or three casts of the lead.

Old Flie.

Westwards from the buye upon Keeshoeck lieth the Old-Flit, it lieth in first southsouthwest, & then forth to the buye upon the Nefse, in the Tessel streame. The after flood

with the fore ebbe fall in verie strong into this channell. In failing upwards you might faile within it in 4 fathome. The markes of it are, the fteeples of Franicker right to the southwards of the fteeples of Harlinghen. From thence outwards unto Schieringshals the west shore is verie fteepe, in eight fathome you shall be close by the shoare. The fareway betwixt these buyes, and thwart of the buye upon the Ellbowe is tenne and eleven fathome deepe.

From Keeshoeck to Wolfshoeck the course is first north-west, and northwest and by north unto the buye betwixt them both, by some called the Schortum, and by the Pilots the buye upon the Ellbow: and then from thence to the buye upon Wolfshoeck, north, or somewhat more easterly, which lieth in four fathome on the east shore.

Wolfshoeck
Schortum
the buye
upon the
Ellbow.

From the buye upon Wolfshoeck unto the buye upon Schieringshals the course is northnorthwest, and northwest and by north according as the wind and tyde shall be. To the northwards or to the eastwards of the buye upon Wolfshoeck goeth up a broad bight southeast farre into the groundes, so deepe as the right farewaie, called the In-schot, comming in you might faile within it in seven fathome, the foreflood falleth from Schieringshals verie strong into it, & the fore ebbe to the contrarie, very strong out of it upon the tayle of Schieringshals, whereby manie ships are miscarried.

Schiering-
hals.

The In-
schot.

Schieringshals is a tayle of sand, which shooteth off from the west shoare, upon it lieth a white buye in three or four fathome, comming in from without, men might faile within it in sixe fathome, the right deepe betwixt Wolfshoeck and Schieringshals is nine fathome.

From Schieringshals to Longsand, the course is northwest, and northwest and by north, betwixt them both on the west shoare it is shallow water, and the best road of all the Flie streame, there goeth also little tyde. The right deepe is eight, nine & ten fathome, Longsand men might fail within it on the eastshore, in failing up, but if they keepe themselves in seven or eight fathome, they shall not come to neare neither of Longsand nor Schieringshals. When the eastermost house upon Grindt commeth a little to the northwards of the westermost, then you have even the length of the buye upon Longsand. From Longsand to the Sloot the course is forth northnorthwest, the right deepe is tenne fathome, or men runne alongft by the beacons upon Crakesand, untill they come into the Sloot.

Longsand

Monck-
sloot.

Of the tydes.

AT Amsterdam a northeast & southwest moone maketh the highest water.

At Horne, Enchuyfen, & at Vrck a north & south moone.

Betwixt Cripple sand and the Creyl a north and by west and south and by east moone.

Vpon the Frieze and Wieringer flat a northwest and southeast Moone.

CHAP. II.

Of the lands Flieland & the Schelling, & of the channells of the Flie and Ameland.



THE Iland Flieland is three leagues long, and a land verie good to be knowne: upon the east end lie high white sandhilles, and to the westwards it is a land full of short low hommocks or nobbes. Vpon the west end standeth a Church with a mill to the eastwards of it. From the west end shooteth off a riffe a good waies into sea. To the westwards of this riffe, betwixt Flieland and the Eyerland goeth in a deepe, called the Westergatte, or Westflieland deepe, which is not for great ships, but onely for Fisher boates, there is not above eight or ten foot water. Vpon the east end standeth a mill with a cape, the which are markes for to avoid the groundes, which lie before the Fly.

The

The east end of Flieland, and the west end off Tessel lie eight leagues a funder.

To the eastwardes of the Flieland lieth the Schelling, which is about three leagues long. Vpon it stand four churches, with one chappell, the westermofst is a high flat steeple called Brandaris. About the middest of the Iland stand two steeples, the westermofst is flat, called Zeerip: the eastermost is sharpe, and is called Midlands. To the eastward stands yet a high sharp steeple called the Horne, and a Chappell called S. Iohns. Vpon the east end lie high white sandhills, & upon the west end lieth but one, called the Lit; betwixt Midlands and the Lit it is low Nubby land. Vpon the west end standeth a cape with a Fire-beakon, whereon there is fired by night.

Stortemelck.

FOr to saile into Stortemelck (that is the Land-deepe of Flieland) you must bring the Cape upon the east end of Flieland, and the mill one in the other, which shall stand then from you southeast & by east or a littel more easterly, saile right in with them, and you shall fall right with the outermost buye, which lieth in five fathome upon the outermost point of the long banck, which banck is on the north-side indifferent flat, so that when you come from the north, you may run alongst by it upon your lead in five or six fathome, and so also find the foresaid outermost buye. You may also (for need) run alongst somewhat to the eastwards of the outermost buye, over the end of the long banck in three fathome, or 16 foot towards the shore, but not to the eastwardes of the second buye, but a good waies alongst to the westwardes of it, which lieth even to the southwards of a point of another narrow taile of sand, upon which thwart of the buye is but eleven foot water, betwixt that taile and the long banck runneth a creek to the eastwards into the grounds, of five fathome depth. It happeneth sometimes that the ships that come over the end of the long banck, and finding againe deeper water, thinke that they are in the right deepe of Stortemelck, and luffe up into it, but they run into the foresaid shoare or creeke, in betwixt the two tailles of sands, not without great danger with a westerly wind, where they must goe out backe againe. Comming from the westwards alongst by Flieland in foure or five fathome, you shall not also saile to run in sight of the foresaid outermost buye. He that falleth about Stortemelck by night, let him bring the fire-beakon southeast and by east from him, and runne in so right with it untill hee come by the shoare, and he shall run alongst to the westwards of the outermost buye. In Stortemelck lie seven blacke buyes, and one white buye, in sailing in you must leave all the black buyes on the larboard side, and run alongst to the southwards of them: and the white buyes on the starboard side, like as all other white buyes as well in the Booms-gat, the letting, as upon the Flie streame. The second buye called the outermost Droghe dry, lieth in 11 foot upon the shouldest of the channell, to the southwards of it also is no more then eleven foot water, but a little within, is againe sixteen foot deepe. The third is called the innermost Droghe dry, which lieth in sixteen foot, the right deepe betwixt them both is three fathome. The fourth is called Heyckhook, betwixt this & the third it is in the farewaie five fathome deepe, over against the fourth lieth the white buye at the strand, thwart of it runneth off a little tail from the shoare, which (in sailing out) you might saile within it. Vnto this white buye, or unto the fourth buye from without, it lieth in eastnortheast, from the fourth to the fift about east, and then more and more southerly. The fift buye is called the outermost point buye the sixt the middlemost point buye, and the seventh or last the innermost point buye, Betwixt the outermost & the middlemost point buye, neereft to the outermost, runneth off a taile of sand from the shore, which men might saile within when they come in, which groweth out sometimes as farre as the buye, and then the Deepe breaketh through againe by the shoare, and scoureth awaie the taile altogether to the north-

side. From the innermost buye you must runne in all a longst by the strand of Fly-land, or on southwards to the buye upon the Plate.

Booms-gatt.

FOr to saile in at the Boomkens-gat, comming out of the sea, or from the westwards: bring the Cape upon the Schelling and the steeple of Brandaris one in the other, which shall then stand from you southsoutheast, and south-east and by south, run then right in with them; and you shall find the outermost buye without the channell in the sea in eleven fathome, a little without, and to the eastwards of the eastermost point of the steepe grounds, which are without upon the north side so steepe, that you shall be in twelve fathome verie close to them, whereupon remaineth no more then five foot water. Close to the eastwards of the foresaid Cap standeth a Fire-beacon, whereupon is fired everie night, as upon Brandaris. If by night you bring the fires on in the other, or the fire of the Fire-beacon even to the eastwardes of the fire upon Brandaris, and saile in so right with them, untill you come against the south shoare, you shall runne close alongst by the outermost buye: when as then the fire upon Flieland commeth to be southsouth-west, or a little more westerly from you, you shall be thwart of the outermost buye, or the outermost of the steepe ground. The foreflood falleth eastnortheast thwart over this channell, almost untill halfe flood before it setteth right in, and contrariwise the fore-ebbe falleth also westsouth-west thwart over the channell, almost untill halfe ebbe before it set right out: therefore it is best with a northeast or easterly winde, and a fore-ebbe to seeke to the shoare somewhat to the eastwards of Cape and steeple, and runne alongst by it in five fathome, which is cleane & flat all alongst untill within Cape and steeple. The second buye lieth in foure fathome, within the outermost point of the steepe grounds, lying from the first about south and by west. Betwixt these two first buyes it is twentie foot deepe upon the shouldest of the channell thwart of the foresaid point of the steepe grounds, which are at the end so steepe, that it is close to them 18 foot deepe, the east side is flat rising ground, & shouldest by little and little from eighteen to sixteen, fourteen, and twelve foot. To the eastwards of the second buye, the farewaie is three fathome deepe, to the westwardes of it, is five fathome, but not farre, therefore you may not run far alongst to the westwards of it, with a fore-ebbe you shouldest bee verie soone on against the steepe grounds, which are on the inner side also verie steepe. The east shore you may runne as neere to it as you will upon your lead, but with a storme the sea breaketh verie much upon it, and is in a breach all alongst untill the second buye. The second, third, fourth, and fift buyes lie, all upon one course one from the other, to wit south and north, the third in five fathome on the east shoare, but yet men may well goe about to the eastwardes of it, the east shoare is thereabouts flat, and the farewaie to the westwardes of the buye is seven fathome deepe. The fourth called the buye upon Feyhoeck, lieth also on the east shoare (but neerer then the third) in five fathome, which men may also saile alongst to the eastwardes of it, the farewaie to the westwardes of it, is nine fathome deepe. Vntill you be past that buye, you may saile in from without upon your lead alongst by the east shoare, & also by night or darke weather, but from thence inwardes, it is also steepe. The fift buye, called the outermost buye upon the Bosse, lieth in foure fathome also on the east shoare, which is there verie steepe, the farewaie to the westwardes of it, is eleven fathome deepe. From the outermost Bosse buye to the innermost buye upon the Bosse (which is the sixt) the course is south and by east, which lieth in four fathome close to the shore, which is also thereabouts verie steepe, the farewaie to the westwards of it is tenne fathome deepe. From the foresaid innermost buye upon the Bosse, unto the Robbegat, the course is southsouth-west, the same course lieth right through Robbegat unto the point of Flieland, where in lie three white buyes on the

on the west shoare, and three black buyes on the east shoare, betwixt which men doe runne through. The outermost white buye lieth from the innermost buye upon the Bosse right south west, he that commeth in with a foreflood, must faile at least south west, or sometimes yet more westerly, that he may not fall to leewards of the blacke buye, the foreflood falleth verie strong into the letting, and the afterflood turneth about again to the westwards with the fore-ebbe out at Stortemelck, but you may easily see from one buye to the other. In the entring of Robbegat betwixt the two first buyes, it is sixteen foot deepe, betwixt the two last buyes thirteen foot, and in the middest five, sixe, seven and foure fathome. Being through the Robbegat runne to the strand of Flieland, and verie close alongst by it, or to the buye upon the Plate, which lieth in foure fathome on the east shoare, which is indifferent flat, but within the buye, it shooteth somewhat out with a point, and waxeth steepe.

For to sail into the Ietting, the course is from the foresaid innermost buye upon the Bosse, unto the buye upon Hobbefand also south and by east. The farewaie alongst to the westwards of the buyes is tenne and nine fathome deepe. From the point of the Bosse unto Hobbefand lieth alongst a small ribbe, upon which remaineth two fathome, and at the deepest sixteen foot water, to the eastwardes of it there is againe sixe, seven, eight and nine fathome deepe, men may runne alongst therein times of Ice-drift, or the like, unto the Bootsgat, where is upon the shouldest eleven foot water, and over the shouldest there is againe three fathome, and before the Schelling five, sixe, and eight fathome deepe, there men doe lie as in a haven, in regard the sands thereabouts doe fall drie at low water. In the Ietting lie sixe blacke and foure white buyes, the black buyes you must leave on the larboard side in sailing up, and the white on the starboard side. From the buye upon Hobbefand, unto the first blacke buye in the Ietting, the course is south, and south and by east. The farewaie betwixt them is nine and eight fathome deepe. About halfe waies betwixt these two buyes, lieth also a white buye on the west side upon Speckhook, to the southwards of it goeth a creeke westsouthwest, or south west and by west through the grounds, and commeth out to the northwards of the buye upon the plate against the point of Flieland into the Flie streame, there remaineth upon the shouldest eleven foot water: with a foreflood you must faile at least westsouthwest, or rather more westerly. The second buye in the Ietting lieth from the first south, the farewaie betwixt them both is sixe fathome deepe.

Over against the second buye lieth a white buye on the west side, upon the point of a taile of sand, which men might faile within, in sailing up. Betwixt these two buyes it is not deeper then two fathome. From the second buye to the third and fourth, the course is south, and south and by east, and the farewaie three fathome deepe. Over against the fourth buye, (called the buye upon the Nakens) lieth the second white buye upon a point which men might sail within in sailing out: within that, the land falleth away with a great bight towards the south west, there is good ancker-ground and road in five fathome. From the fourth buye saile along by the beacons upon the Nakens eastsoutheast on, untill that Brandaris come close by Grindt, but not to it, keepe that so standing, and runne on south, and you shall saile right upon the buye which lieth upon the taile of Hendrick tlaerts plate, which you might faile within on the east side. Leave that on the larboard side, and runne alongst to the westwards of it, southsoutheast unto the last buye, which lieth upon the south point of the foresaid Hendrick tlaerts plate. Over against the beacons upon the Nakens lie on the south side two white buyes, the easternmost upon a taile of sand, which men might faile within, in sailing off. To the southwardes of it, betwixt the two last blacke buyes, by the west side, is the road where the ships doe ancker for to light, which are bound to Harlinghen.

All the depths here before rehearsed, as well of Stortemelck as of the Boomkens-gat, are said of the lowest water, at half flood it is three foot deeper; it floweth upon these foresaid places with a common tyde five and an half or six foot up and downe. The numbers of the depths set downe in the carde of the Flie and Ameland-gat, are to be understood of feet: as for example, by the outer buye of the Boomkens gat stand 66, that are 66 feet, or eleven fathome, sixe feet being reckoned for a fathome.

Ameland gat.

Two leagues to the eastwardes of the Schelling lieth Ameland, lying eastnortheast and westsouthwest four great leagues. Vpon the west end of Ameland standeth a Cape, & a great thick flat steeple, called the Hoelme, the rooffe of this church is broken off, but the after fronte with the rooffe standeth above the side walls, to the eastwardes of the church of Hoelm standeth a mill, with a house to the westwardes of the mill, also a broad flat towre. About the place where Midland church was wont to stand, lie three or four white sandhilles, which are low flat and long, towards the east end it is nobbie land, with white amongst it. From the west end of Ameland runneth off a riff, almost three leagues into sea, called Bornriff, which is upon the outer side verie steepe: come no nearer it, then in 12 fathome, comming from the eastwards you cannot saile within it, but in sailing alongst by it seven fathome, you may not run a bowles cast a longst without it.

For to saile into Ameland gat, comming out of the sea, bring the cape upon the east end of the Schelling, right over the steeple of Horne, which shall then stand from you southsouthwest or a little more westerly, saile in right with them, untill that the cape upon Ameland, and the steeple of Hoelm are one over the other, then leave the first markes, and saile in upon the second, & you shall finde the outermost buye, which lieth somewhat within the outermost point of Bornriff. Comming from the westwards, runne alongst by the strand of the Schelling in five, or five fathome and an half at lowe water, and you shall not faile to saile right upon the outermost buye, and then the Cape and steeple upon Ameland shall also come one over the other, and stand from you east, or a little more southerly. Comming alongst by the Schelling in four fathome, you shall not faile within the Koggedeepe grounds; over against them lieth the first buye on the southside of Bornriff, run alongst to the southwards of it, keeping the Cape & steeple one over the other, untill you be past the second buye, which lieth thwart of the west end of Kamper sand, the farewaie betwixt these two buyes is 5 and 6 fathome deepe.

Being past the second buye, bring the steeple somewhat to the northwards of the Cape, & goe on eastnortheast towards the third buye upon Geritshonden, for to avoide the plate which lieth off from the southside, towards Bornriff, on it lie two white buyes, the first over against the foresaid third blacke buye, the other over against the fourth blacke buye, lying from the third about southeast; leave the black buyes all on the larboard side, and the white on the starboard side, and run through so betwixt them both, the plate is on the northside indifferent flat, so that you may run to it upon the lead; reckon well your tydes, especially be carefull of a fore-ebbe, which falleth verie strong over that channell northnorthwest into sea over Bornriff. Betwixt the second and third buye in the farewaie it is eight and nine fathome. Betwixt the third and the foresaid plate seven fathome. Being past the fourth buye, both sides are verie steepe, and the farewaie 8, 9, 10, and 12 fathome deepe, goe then in southsoutheast untill that the steeple of Holm come over the south point of Ameland where the boats lie, and then you come in the hight where it is on the south side flat, and good ankering in five or six fathome, the north shoare is verie steepe.

For to saile further into the Horfen, goe away from
B the bight

the bight eastnortheast alongst by the south side in five or sixe fathome, so long untill Heynooms chamber (being a reed tyled house) come a handspikes length to the northwardes, or to the eastwardes of Holmchurch, ancker there in five or sixe fathome, you shall ly there in good ground, and sheltred for all windes, also there goeth little tyde, in this farewaie, it is twelve fathome deepe: the north shoare is there verie steepe. These foresaid depths (like as also those of the Flie) are said of low water.

Of the tydes and course of the streames.

IN the Flie and Ameland gat a southeast and northwest Moone maketh high water. Before the Flie the flood falleth to the eastwardes thwart over the grounds, almost untill halfe flood, before it setteth into the Boomkensgat. Likewise the ebbe to the contrarie falleth to the westwardes thwart over the grounds, almost untill halfe ebbe, before it setteth right out at the channell. The afterflood turneth about with the fore-ebbe, and fall alongst Flieland out at Stortemelck, but the foreflood runneth right into Stortemelck.

Of the depths about these places.

THes Ilands, Flieland, the Schelling and Tessel men may see in 15 & 16 fathome.

Thwart of the Schelling the ground is white sand.

The steepe grounds or Peter-land, & Bornriff, are verie steep on the off sides, close by them is 12 or 13 fathome deepe.

Ameland men may see in 12 fathome, the depth of 13 and 14 fathome runneth farre of to seawards, so that men cannot see in fiftene fathome.

Courses and distances.

Petersand, or the steepe grounds, and Bornriff lie northeast and by east, and southwest and by west four leagues asunder.

From the Flie to the northeast end of the Broad-four-
teens, the course is westnorthwest 8 leagues

From the Flie to Timmouth, or Newcastle, westnorth-
west 90 leagues

From the Flie to Hitland the course is n. w. & by north so-
mewhat northerly 152 leagues

From the Flie to Fairehill northwest and by north about
144 leagues

From the Flie to Scuytenes the course is north and by west
somewhat northerly 106 leagues

From the Flie to the Naes north and by east about,
85 leagues

From the Flie unto the Riff in sixteene fathome north and
by east 63 or 64 leagues

From the Flie to Boevenbergen the course is northnorth-
east, or a little more easterly about 69 leagues

From the Flie to Rinkoppe, or Numer-deep northnortheast,
or a little more easterly about 58 leagues

From the Flie to the Iland Silt on the coast of Iutland the
course is northeast 46 leagues

From Bornriff to the Naes the course is north or a little
more easterly 82 leagues

From Bornriff to Holy land northeast and by east
33 leagues

From Bornriff to Wrangheroogh eastnortheast 29 leagues

From Bornriff to the Wester-Eems 14 leagues.

How the foresaid lands doe shew themselves at sea.



Thus sheweth Flieland when you are about two leagues thwart off from it.



Thus sheweth the Schelling when you sail alongst by it about two leagues from the land.

Ameland sheweth is selfe thus when you are about two leagues thwart off from

C H A P. I I I.

*Of the Scholbalg Lawers, Schille, and of both the
Eemses.*



Schiermonckoogh lieth from the east end of Ameland east somewhat northerly three leagues, it is a little low plaine Iland, about 2 leagues long, there standeth no special thing upon it to be knowne, but upon the west end two capes, with a white sandhill, otherwise it is all with lowe blockish sandhills or hommocks, (but higher then upon the east end) & mingled with white: the east end is a long flat strand, with little low rough sandhills. When you bring the two capes upon the westend one in the other & runne so in, you shall finde the outermost buye, which lieth without the channel, at sea in seven fathome, or thereabouts. Sometimes there lie two, & sometimes three buyes in the cannell, which you must leave on the starboard side, & runne alongst to the eastwardes of them, being come within the channell you shall finde beacons also on the west shore, which you must followe all alongst, untill you come to Ostmerhorne, where you may anker. The lying in, and depths of that channell do alter & shift often times, & sometimes much within a short time, so that there is no certaintie to be written of it, whereunto men might trust.

Four leagues to the eastwardes of Schiermonckoogh lieth the Iland Rottum, and betwixt them the little Iland the Bosch. A fewe yeeres past, through setting of spyrie grasse or heath, there was growne two or three handfom sandhills, but are now again altogether blowne awaie, and altered into a plaine flat strand, which the sea at high flouds doth altogether runne over.

Betwixt these Ilands the Bosch and Schiermonckoogh was wont a channell to goe in of indifferent depth called the Lawers, which is now most cast to, by the foresaid strand of the Bosch, which is growne in all alongst unto the Oogh, so that there is no more remaining then a narrowe & shold crecke.

To the eastwardes of the Bosch goeth in the Schille, also an altering and uncertaine channell, which is sometimes deepe, and sometimes againe shold, and the channell shif-
teth too & againe, so that there is no certaintie to be written of it, whereunto men might trust.

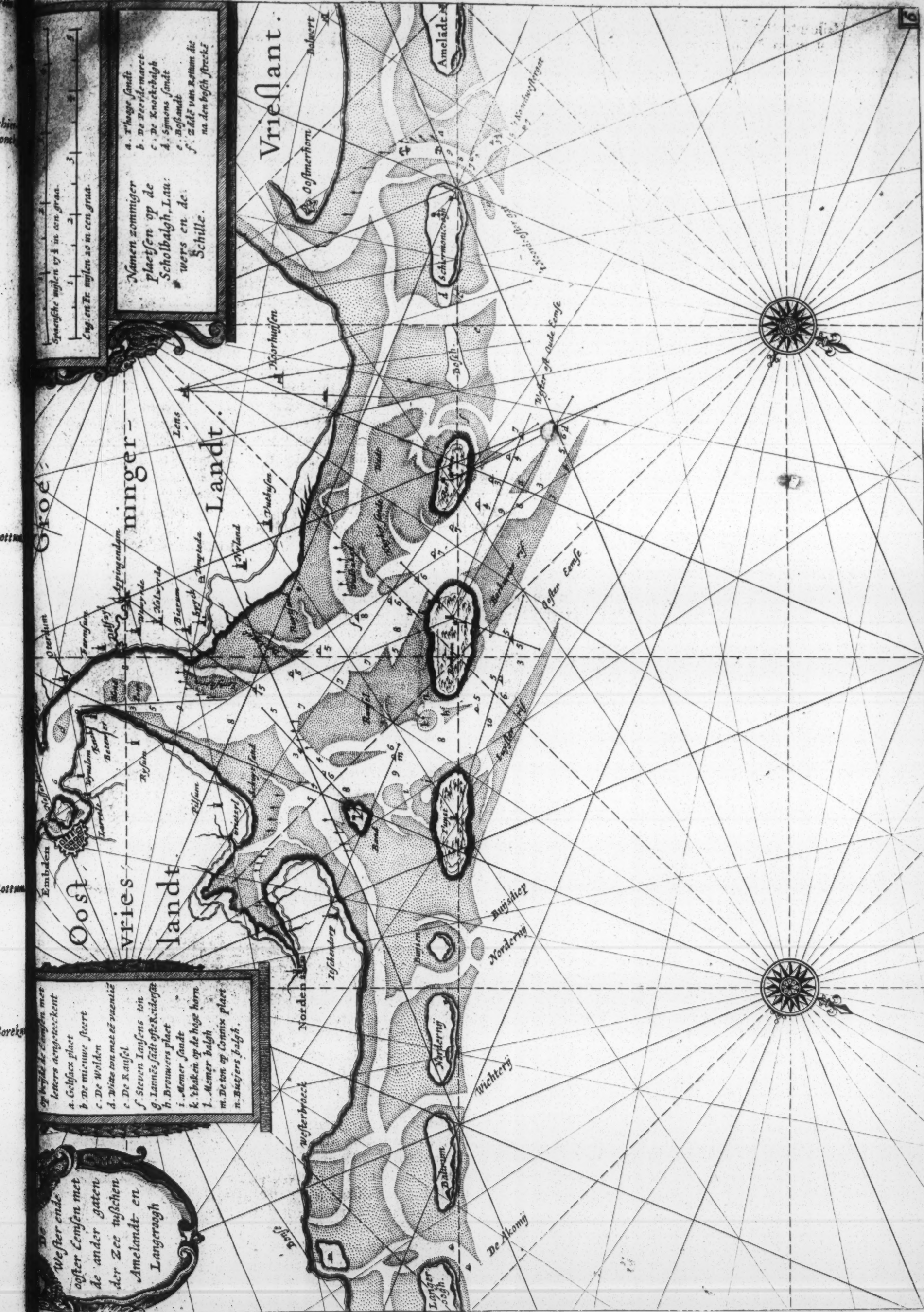
The Wester and Easter Eemses.

THe Iland Rottum is a little Iland, about a league and half long & verie good to be knowne, the west end is high and steepe, the rest is low land with some little sandhills. Vpon the east end stand two capes, the greatest, or the runner standeth upon the east end upon the flat strand, the smallest on the south side of the sandhill. There stand also two houses upon it, the one upon the west end, the other in the midst of the Iland in a valley.

Borckum is also an Iland good to be knowne, two great leagues long, it ariseth commonly, (when you come in out of the sea) in three parts, as if it were three Ilands, when you come from the westwardes, it sheweth it self in four parts, for with high flouds the water runneth through in three places. The Worthy counsell of Embden hath caused to be set upon the west end a high thicke steeple, which men may see far off at sea, on the westside of that steeple standeth a little low church.

From the west end of Borckum shooteth off a riffe a great waies into sea, called Burckum riffe: to the southwardes of it, to wit, betwixt Burckum & Rottum goeth in the Wester Eems, which is the verie best channell, that lieth in all this coast.

For to



For to saile into the Wester Eems, you must bring the capes upon Rottum one in the other, which shall then stand from you about eastsoutheast, sail in out of the sea right with them, and so you shall finde the outermost buye in six fathome at low water.

Geltsacks-plate. Or els, if you come from the westwards running alongst the shore in seven fathome, then you shall runne also in sight of the foresaid buye, then the steeple of Burckum shall stand east from you, and the west end of Rottum about southeast & by south. Towards the land, from the second buye lieth a plate, called Geltsacks-plate, which lieth all alongst the reach, unto the fourth buye, whereupon is no more then 14 or 15 foot depth at low water.

From the first buye to the second, third, and fourth the course is all alongst east. The second buye lieth in five fathome, the third in four fathome and a halfe, that is, upon the showdest of the Wester Eems: the fourth buye lieth also in four fathome and a half, upon the point of the foresaid plate. All these buyes you must leave lying on the starboard side, when you saile in.

Comming from the westwards thwart of the Lawers or Boffand, then keepe the sounding of the shore in five fathome, untill you be past it, sail then boldly on east, & then you shall runne through within Geltsacks plate, in three fathome and an halfe, & so come by the fift buye into the deepe of the Wester Eems, then keepe still the sounding of the south shoare. The Herring bancks, which were wont to lie off to seawards, at the west end of Rottum, are quite and cleane gone awaie, so that it is wide & broad betwixt Rottum and the foresaid plate.

The Riffe or Borckum is on the off side & upon the end flat, when the Capes upon Rottum stand southeast from you, then you may saile alongst over the Riffe, right unto the fourth buye, & so you shall finde upon the taile of the Riffe at low water not lesse then sixteene foot water, for it is flat and broad. On the Inner side it is verie steepe & needle too, there shooteth off also from the Inner side a tayle of sand, which men might saile within at unawares, in sailing up, you may not come nearer to it, then seven fathome, all alongst untill you come to Borckum.

The fift buye lieth in the middest of the farewaie in eight fathome, with an ebbe and a southerly winde you must go on at east southeast, or els you should lightly come a ground on Borckum riffe, or within the afore said taile, which shooteth off from Borckum riffe.

Huyberts plate. From the fift buye, to the sixt, seventh and eight, the course is all alongst east and by south. The sixt buye, as also the seventh lie in the middest of the farewaie in eight fathome, the eight in five fathome upon the point of Huyberts plate, which of some is called the Haecks, that is a taile which shooteth off from the south shore. You may borrow by the lead of Rottum or the south shore, and not doe amisse, but you might saile upon this taile of Huyberts plate in 5 fathome at lowe water, but keeping in 6 fathome you shall runne cleare without it. Being at the buye upon Huyberts plate, then Borckum steeple standeth about north-northeast from you, and thwart of it in the farewaie it is 12 fathome deepe.

Stephen Johnsons buye. From the buye upon Huyberts plate, unto Stephen Johnsons buye the course is southeast, which lieth betwixt the Balghbeacon and the Ruytbeacon, in seven fathome and a halfe. The Eemse betwixt these two buyes is ten & twelve fathome deepe. Comming past the buye upon Huyberts plate, you must edge somewhat off from Borckum, for to avoide the Mieuwestaile, which shooteth off from the Wolden or the south end of Worckum, which you might sail foule upon, in 5 fathom, when you are bound inwards.

Mieuwestaile.

Westwards from Stephen Johnsons buye standeth that Wadtbeacon, right to the southwards of it goeth in the Wadt. On the other side over against the foresaid buye lieth the Ransel, that is a taile which shooteth off from the north shore, which men might saile within, in five fathome, when they saile upwards. The markes of this Reach, and for to avoide the Ransell are these: Vpon the south end of Borckum lie two little sandhills, called the Wolden, keepe the

steeple of Worckum to the west side of these sandhills, or to the westwards of them, and then you shall go cleare of the Ransel. In that reach it is nine and eight fathome deepe.

Dockbuy. From Stephen Johnsons buye to Dockbuye the course is eastsoutheast, betwixt these two buyes standeth a beacon on the south shore, called the Ruytbeacon, by this buye the Eems is in the farewaie about seven fathome deepe, this buye lieth on the south shore, in five fathome, upon a taile which men might unawares saile within in sailing up; the floud falleth verie strong behind this buye into Dockegat, whereof men must be verie carefull. The marks of Dockbuye are, when that cloister of the Dam (being a flatte church commeth to the westwards of Oldcloister, so as one may even see through betwixt them, then you have the length of this buye, and then these marks stand about south from you. From dockbuye to the last buye the course is alongst e. f. e. being past that you shall espie the beacons on the west shore, saile alongst about by them. That reach from Eemshorn to Delfzile lieth by little and little up more southerly unto Wadem. The marks of Eemshorn, are, a mill in Embderland about east & by north from you, & a high house to the northwardes of the church: when the mill commeth to stand betwixt that house and the church, then you have the length of Eemshorne: about Eemshorne stand 3 or 4 beacons, which leade you even unto Groningerland. Being come past Dockbuy, then you may found along by the west shore: until you come to Oterdom in 5, 6, & 7 fathome, come also no nearer to it, for it is verie steep: the east shore in sailing up, you may saile within it in six fathome, behind a plate called the Hondt, being a hard sand, & further in, lieth yet another plate called the Pape, also a hard sand, & are fast one to the other, but the west shore is soft & clay ground untill you come to Oterdom. You must keep al alongst the west shore, & follow the beacons, which stand there alongst the side.

This reach lieth in first f. f. w. and south & by west, and so about f. f. e. in a bight, and f. e. alongst by Groeningerland.

Reyder sand. For to avoide Reyder sand or Iannens-sand (that is a plate in the middest of the Eems, betwixt Oterdam & Reyde, whereupon at low water is no more then 10 foot, you must look out for Oterdom a flat church without a steeple, standing in Groninger land on the dyke, when you come thwart of it, edge over to Embderland, to wit, to the Knock, which is a steeple broken of, standing in the water upon the point. Comming by the Knock then runne with in two cables lengths alongst by the north shore unto Loegerhorn, & then you shall not saile too neare the plate. There standeth a flatte steeple betwixt the Knock and Loegerhorne, called Gerritswaert, when that you can see through that steeple, or when that steeple & the church come one to the other then are you thwart of that foresaid plate.

When you sail up the Wester Eems, you must leave al the buyes on the starboard side.

A f. e. & n. w. moone maketh without in the Eems the highest water: in the Balgh a f. f. e. and n. n. w. moone: Before the towne of Embden, a fourth, or fourth & by west, & a north or north and by east moone.

Iland Iuyft. The Iland Iuyft lieth a great league, or a league and a halfe n. e. from Borckum, which is a little low Iland, the west end is a high steepe point & gray land, the east end is higher then the middest. The church standeth in the middest upon the land, the steeple is somewhat sharpe & standeth at the east end of the church, one cannot see the church but thwart of a low place or valley. Betwixt Borckum & Iuyft goeth in the Easter Eems. From the west end of Iuyft lieth off a riffe two leagues, or two leagues & a half west into sea, on the off side you may found it in 3 or 4 fathome, to the southwards of it goeth in the Easter Eems.

Easter Eems. For to sail into the Easter Eems, then bring the church upon Borckum south from you. If it be then cleare sight, you shall be able to see through the steeple, sail then right in with it, & you shall finde the outermost buye in 4 fathome, or 4 fathome and a halfe at low water.

From the outermost buye to the second the course is east & by south. The end of Iuyft riff (betwixt the two buyes) is on

is on the inner side so exceeding steepe, that you cannot find it, but further in from the second buye it is flatter, and there you may wel find it. The second buye lieth in three fathome at lowe water, upon the point of a long narrow banck or Hoeck, which shooteth of from the east end of Borckum, which men might unawares faile within, called Brewers plate, which tail is on the north side verie steepe. Betwixt the first and second buye it is 4 fathome deep at low water, thwart of the second buye it is againe deeper, to wit 8 and 9 fathome. From the second buye the Easter Eems lieth in further east & by south, and e. f. e. and by little and little more southerly, but with a flood you must goe on from the second buye at least east, & east & by north, that you may not be carried within the foresaid point of Brewers plate. Iuyft riffe is further in, of from the second buye flat, so that you may find it in 5 or 6 fathome, & come not also nearer to it, least you faile within Memers sand: that is a taile, which shooteth off from the foot strand, within Iuyft from memersand. As soone as you get againe deeper water, then runne first e. f. e. & afterwarde on f. e. unto the beakon upon the High Horne, that standeth upon the drye sand on the starboard side, edge up to the southwardes or the westwardes behind the beakon, there is the road in 5, 6, or 7 fathome, & good riding for a southerly winde.

The Easter Eems is thwart of it wide and broad, the east end of Borckum is thwart of it wide and broad, the east of Borckum is flat that you must not spare the lead, when you faile out or in there, with a ship of great draught.

About southeast, & southeast and by east from the afore-said beakon lyeth the buye upon Kingsplate, being a taile which shooteth of from the south shoare, this buye with the afore-said beakon you leave lying on the starboard side there betwixt them both is a good road on the south shore. At Norden in Eastfrieland stand two steeples close one by the other, whereof the one is flat and thick, and the other long and small, when these steeples come a ships length to the eastwardes of the eastermost side of the Bant (being a little Iland lying upon the Wadt) then you have the buye upon Kings plate, that are good longst markes: and when the steeple of Iuyft commeth to be northnortheast from you, that are good thwart markes of the same buye.

From the buye upon Kingsplate unto the buye upon Hambourg sand the course is f. e. and southeast and by east, which lieth in three fathome, this is Pilots water for great shippes. You may runne from thence through a creeke, and come out against the southermost buye upon the Wester Eems. For to faile through this creeke, you must leave the buye upon Hambourg sand on the larboard side, and faile along by the beakons, leaving them on the starboard side, at both the endes of this creeke it is three fathome deepe, and in the middest five, sixe and seven fathome, and lyeth about. f. f. w. through, al alongst in to the Wester Eems.

About a halfe league, within Iuyft, betwixt the beakon upon the High Horne and the buye upon Kingsplate, on the east side of the Easter Eems lyeth Memer balgh. It lieth in most north, that is a good road for small ships, that are bound to the westwardes, or out into sea. Within the Balgh he that runneth in by the High Horne shall finde good road for small shippes, that are bound to the eastwardes which lieth in south.

Comming from the eastwardes, you may find Iuyft riffe, which is flatte on the off side, without, in the point of the, Riffe is a Share or Deadbalgh, with two pointes, betwixt them it is three fathome and an half deepe.

A southsoutheast and a northnorthwest moone maketh (without in the Easter Eems the highest water.

To the eastwardes of Iuyft lyeth Buys, the shortest and smallest Iland that is upon all this coast. It riseth up in two Hommocks, whereof the hommock which is the most easterlie is the highest and sharpest.

Betwixt Iuyft and Buys goeth in the Buys deepe: the Wor. Counsel of Embden was wont to set it with buyes, but is donne no more, in regard it doth so oftentimes shift.

Two great leagues to the eastwardes of Iuyft lieth Nor-

derny, betwixt them both lyeth that little Iland Buys, Norderny is to be knowne by a broad flat towre, which standeth upon the west end, but sometimes men can hardly perceive it. About the middest of the Iland, nearest the east end, lyeth a high white sand hill, thereby it is best to be known. Further the land is all full of hommocks. Betwixt Norderny and Buys goeth a channel, called the Noord-deepe, or Norderny.

A great league to the eastwardes of Norderny lyeth the Iland Baltrum, which is about two leagues long, a little shorter then Norderny. Vpon this Iland standeth no speciall thing, whereby men may knowe it: but upon the east end a high sandhill, which is sharp above, the west end is low sandhilles. When the foresaid high sandhill is south-east and by east from you, then it is round to see to: upon the west end there goeth a swamp through.

Betwixt Baltrum and Norderny runneth in a channel, called the Wichterie, there is no certaintie to be written of it that men may trust to, sometimes there is two fathome water & more, and sometimes againe no more then four or five foote.

The Iland Langeroogh lyeth a league to the eastwardes of Baltrum, which is four great leagues long, and hath on the off side a faire strand, and three or four sandhilles, whereby men may knowe it, which lie from about the middest of the Iland unto the west end, a good waies one from the other, the tops of them are plaine and flat. Betwixt Langeroogh and Baltrum goeth in the Acumy, wherein lie two buyes. It is no channel for great ships, it lyeth out alongst by the footstrand of Langeroogh, first northeast, & then somewhat more easterly but it is not to be trusted to, because it altereth and shifteth very often.

Betwixt Langeroogh and Wrangeroogh lyeth the Iland Spykerroogh, which is about a league long. At the east end there was wont to lie a little Iland good to be knowne, called Luttick Spykerroog, which is now altogether gone. Vpon Spykerroogh standeth nothing, whereby men might knowe it, but is a black land with hommocks and nobbes, like to the other Ilands: betwixt Spykerroogh and Langeroogh goeth in the Oxebalgh.

Wrangeroogh lyeth two great leagues to the eastwardes of Langeroogh, which is a great league long, being a little plaine white Iland: upon the east end lie high broad white sandhills: Vpon the west end, the Earle of Oldenburgh hath caused to be made a great thicke towre, with two spires: when they stand one right in the other, then you are by the outer buye of the Weser; the afore-said towre men may see two kennings of at Sea. Betwixt Wrangeroogh and Spykerroogh goeth in the Harrel, about southsoutheast, but it is not to be trusted to, because it shifteth verie often.

The Acumie and Harrel are sette both with buyes by the Wor. Counsel of Embden: these channels serve not but for small ships, like as all the other lying betwixt the Easter Eems & the Weser.

The land lyeth from Bornriffe to Wrangeroogh east-northeast and westsouthwest 29 or as some wil have it 32 leagues.

Of the tydes and course of the streames.

Before the Scholbalgh the Lawers & the Schille, and also before the Wester Eems a southeast & northwest moone maketh high water.

Before Embden and Delfziel a north, or north and by east, and a south or south and by west Moone.

In the Easter Eems & Borckumbalgh a southsoutheast & northnorthwest moone.

Before the channels, betwixt the Easter Eems and the Weser a south, and south and by east, & a north, and north and by west moone.

In the farewaie betwixt the Flie & the Elve, the fore-flood commeth out of the North sea, & turneth about by little and little with the sunne, falling the halfe tyde east-northeast alongst the shoare, and the ebbe westsouthwest.

SChiermonickoogh men may see in twelve & thirteen fathome four great leagues without the land.

Rottum and Borckum men may see in 14 & 15 fathome.

Thwart of Borckum the ground is grosse red sand mingled with some black.

Iuyft, men may see in thirteen, and fourteene fathome, three leagues without the land it is 12 fathome deepe.

Buys and Norderny men may see from the poope in 12 and 13 fathome.

Baltrum, Langeroogh and Wrangeroogh men may see in fourteene and fifteene fathome.

THe coast alongst these Ilands lyeth eastnortheast and westsouthwest.

From Borckum Riffe to Wrangeroogh eastnortheast 16 leagues.

From the Easter Eems or Iuyft rif to the Steepbuye or Schortunne e. n. e. 20 leagues.

From the Eems to Flamborowhead west somewhat northerly 15 leagues.

From the Eems to Bovenberghen north and by east 60 leagues.

From the Eems to Holy land the course is n. e. and north-east an by east 21 or 22 leagues.

How these foresaid lands doe shew themselves at Sea.

Thus sheweth Schiermonickoogh being two leagues thwart of from you.

Borckum.

Thus sheweth the Iland Iuyft, being about two leagues thwart of from you.

Rottum.

Thus sheweth Borckum and Rottum when you saile alongst by them, being two leagues seaward the land.

Norderny.

Buys.

Thus sheweth the Ilands Buys and Norderny, being two leagues thwart off from you.

Thus riseth Baltrum, when you are about two leagues a seaward the land.

CHAP. IV.

Of the Iade, Weser, Elbe and Eyder.



FOR to saile into the Iade or Wester Weser with a southerly winde, runne to the strand of Wrangeroogh in four fathome, with a westerly winde runne no further then five fathome, and lead it in so by the strand of Wrangeroogh, in four or five fathome, untill you come a good waie within, or to the end of the foot strand of Wrangeroogh, there you shall finde the first buye in five fathome at low water: Menfer church shall then stand south from you. Thwart of this first buye the redde sand is verie steepe, which you must leave on the larboard side, and the buye on the starboard side, when you come in. Thwart of this first buye commeth a tayle shooting off from the south shoare, that is the innermost point of the Stonebalgh, which men might at unawares sayle within, in three fathom and an halfe or four fathome, the first buye is laide upon the point of this tayle. The Stonebalgh goeth into the eastwardes of Wrangeroogh, the south side whereof is steepe, but the north side flat, which men may sound. In this balgh it is ten foot deepe at low water. From the first buye to the second, and alongst to the third, the course is east, the second buye lyeth in two fathome and an halfe: the third, that is the Iade buye lieth in three fathome, upon the shouldest of the Highwaie. It is verie uneven betwixt the first and the third buye, you shall get twise depth off five or six fathome, and then againe two fathome, or two fathome and an halfe.

For to saile from the Iade to the Weser, then saile by the third buye over the shouldest of the High waie on eastnortheast to the Mellembuye, and you shall finde at low water, upon the foresaid shouldest place, or by the third buye, no more water then nine or tenne foot, and being over there you shall gette againe deeper water, and then you are in the Weser: Reckon well your tydes, for the ebbe falleth verie strong northnorthwest out at the Iade, & the flood to the contrarie, very hard inwards, so that you can hardly stemme the tyde, when the weather is somewhat calme, whereof you must be verie carefull.

For to saile further up into the Iade, leave the foresaid

third buye on the larboard side, and goe from thence most south up, unto the point of the Dyke, called Hormerscheel, when you are come by the Dyke, there the Iade is wide & broad, without the foresaid Dyke standeth a beacon or two, for ships that are bound over the Wadt: If you will saile further up into the Iade, then keepe the west shore, until you come thwart of the church without a steeple, which standeth by the Dyke, there you must leave the west shore, because of the Aenten or leppe plate, which shooteth off from the Veer alongst the west shore: and sometimes lyeth drye at low water. The west shoare lieth most southeast somewhat southerly.

A south and north Moone maketh the highest water upon the Iade, and it floweth with an ordinarie tyde two fathome and an halfe up and downe.

The Weser.

FOR to saile up the Weser, come no nearer Wrangeroogh then seven fathome, being in seven fathome, then edge off from the shore into 11 fathome, and you shall there find the first buye at the comming into the Weser, lying in seven fathome upon the taile of the Redsand, Menfer church (that is a flat church without a steeple in Vroukens land) is then southsoutheast from you. Being thwart of the first buye, and that the West of Wrangeroogh is southsouthwest from you, then you runne over the tayle of the Redsand in five fathome.

From the outermost buye to the second, third, fourth and fift the course is due east, which lie all in seven fathom, the southside (to wit the Redsand) nearest, each a point different from Menfer church, so that Menfer church lieth from the second south & by east, from the third south, from the fourth south and by west, and from the fift southsouthwest. The fift buye is called the buye upon the Head, for to knowe that from all the other buyes, there standeth a staffe upon it, of a halfe fathome long, with a white knotte upon it. Over against the buye upon the Head lieth a white buye on the white grounds. Betwixt all the foresaid buies you must reckon wel your tydes, the flood commeth out of the north-west, and falleth alongst over the Reddesand, and the ebbe to the contrarie. The right deep thwart of these foresaid buyes, in the comming in is eleven fathome, but thwart of the buye upon the Head, five fathome at low water,

Right

Palkaart

van de
Wefer, Elve
en
Eyder.

Namen
sommiger plaetsen
op de Elve en
Eyder met letteren
geteekent

a De Schort
b Coelen
c Witte ton op de nieu-
we gronden
d Roeten
e Rotten
f Witte ton op de Stert
van Roomaerder
plaet
g. h. i. De tonnen op
Telgroms sandt

op de Eyder.

k De witte Eyder ton
l Ton op de Hont
m Baken op de Hont
n Yeren Hendrick
o. o. Bakens op den
yeren Hendrick
p De pijp na de Elve
q Hoedemer sandt
r Eylandschen Bulhoofden
s Baken op de Hulck

DITMARS

SCHEN.

EY

Reimers bode

DE RSTEDT.

Garlingen

S. Peter

Imigen

St. Jans

St. Jans

St. Jans

St. Jans

St. Jans

St. Jans

St. Jans

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St. Jans

St. Jans

Spaeghe nelen 173 in een graade
Eg. en Er nelen 20 in een grad.

KEYDINGERLANT.

HOL

S A

T I A.

DITMARS

SCHEN.

EY

Reimers bode

DE RSTEDT.

Garlingen

S. Peter

Imigen

St. Jans

St. Jans

St. Jans

St. Jans

St. Jans

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Spaeghe nelen 173 in een graade
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KEYDINGERLANT.

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St. Jans

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St. Jans

Middle
plate.

Right before the Weser lieth the Middle plate, the easternmost or the Inner side beginneth right to the northwards of the buye upon the Head by the white grounds, and lieth alongst the reach unto the third buye, to reckon from without, and is on both sides flat for to sound about. On the westside of the foresaid plate, lieth a whit buye about north from Menfer church, which you must leave in comming in on the larboard side.

For to sail from the buye upon the Head, out againe to the eastwardes of this plate unto the Elve, then sound it out about the white grounds, in four or five fathome, untill you be out in the sea.

Buye upon
Bollenziele.

For to sail further up into the Weser, the course from the buye upon the Head unto the sixt buye is s. e. & n. w. Menfer Church shall then lie from you southwest and by south, the Weser is thwart of it about 20 fathom deepe. From the sixt buye to the seventh, that is, the buye upon the Cours, or the Wapperbuye, or the southwest buye because Menfer church lieth southwest off from it, the course is southeast. The Iade buye lieth about south, or south & by west from this buye. From the buye upon the Cours unto the Mellem buye the course is yet southeast, which you might sail within at unawares in sixe fathome. Menfer church lieth off from it southwest & by west. From the Mellem buye to the buye upon Bollenziele the Course is s. e. somewhat easterlie, you must reckon your tides there verie well, because the flood falleth exceeding hard into the westshore. Langworder church lieth right south and by east from that buye upon Bollenziele, over against it upon the point of the blackgrounds lieth a white buye, come no nearer to it at half flood then 4 fathom & an half, you might unawares sail within that point (in sailing in) in 4 fathom. From the buye upon Bollenziele to the beakon upon Bollenziele the course is s. f. e. or southeast & by south. Langworder church lieth about south from that beaco, you must leave it on the starboard side comming in. Within that beacon upon Bollenziele is a good road for a westerly winde. From the beakons upon Bollenziele to the first buye upon the flat, the course is s. e. til you come somewhat beneath the beacon, & then along e. f. e. The marks of the first buye upon the Flat is, when you can see through the belhoals of Langworder steeple, then you are thwart of the first buye, Langworder church is then from you somewhat more southerly then s. f. w. From the first buye upon the Flat to the second, the course is e. f. e. Betwixt these two buyes stand five beackons on the larboard side, upon the black grounds. From the second buye upon the flatte to the Meyland the course is southeast and by south. Being come thwart of Wadnis or the Mayland, saile then close along by the greene shore, untill you come within Blixem, there is the road for great ships that are bound to sea.

Like as upon the Iade, so also upon the Weser a south & north moone maketh the highest water, it floweth there also two fathome & a half up and downe.

South-
grounds.

To the eastwards of the Weser lie the south grounds of the Elve, there goe in, two faire deepe Balghs or Creeks of 10, 12, and 13 fathome. The Til, called also Broadbalgh, is the westernmost, & lieth so far to the westwards, that men can but even see the New work from thence.

Wester Till.

If it should happen that comming to the eastwards of the Weser, you should be beset upon the souther grounds, being a lee shore, and be in danger, then saile to the south grounds in 4, 5, and 6 fathome, but not much nearer also, for they are somewhat steepe. When you (running so along by these grounds upon the same course) shal get 8, 9, yea 10 or 12 fathome soft ground, then that is certainly of the Broadbalgh or Wester Till, take then the sounding of which side that you will, & sound it about by the grounds in 4 or 5 fathome, and you shal find amongst the sands smooth water, and good road, and may lie sheltered for all winds. The Wester Till lyeth in first e. f. e. alongst by the north shore it is deepest, on the south shore you cannot saile within any tailes in sailing out, but you may in sailing in: when you come somewhat further in, it lieth up more to the southwards: there are divers Balghs or channels, where men may sail through that are acquainted.

The Easter Tille or Broadebalgh lieth betwixt the Wester Til & the Hondtbalgh, which runneth in seven fathom into the easternmost point, (or the olde Scorhorne) that is a taile which lieth off a good waies, and which you might at unawares saile within in seven fathome comming from the westwards. This Till lieth in also (like as the other) first eastsoutheast, but a little further in more easterly. Here also you may take the sounding of which side or shoare that you will. Being come within, you shall get smooth water off the sands for all windes. In this channel is not lesse then seven fathome water.

The Hondtbalgh lieth right into the westwards of the Steep-buye or Schor-horn. If you will goe in there with small shippes for to saile over the Wadt into the Weser, then goe (when you have the Steep-buye) in southsoutheast. The Hondtbalgh is without indifferent wide, keepe that course untill you come thwart of the beacons, which you must leave on the starboard side, you may well sound in about the east side of the Schorhorne, but not the west side, by it lie plates, which you might sail foule of in nine fathome, in comming in, but on the Schorhorn you cannot doe amisse.

Holyland.

THe Iland Holy land and the outermost buye in the Weser, lie one from the other, south somewhat westerly, & north somewhat easterly. When it is cleare and good sight, you may see Holy land, when you lie in the Weser, by the buye upon the Head. Holyland and Bornriffe lie one from the other southwest & by west, and northeast & by east, according to the common opinion, two and thirtie leagues. When you come from the westwards, and begin to get Holy land in sight, it sheweth it self with a high reddish steep point, which is flat above. For to ancker or make road under Holy land, comming from the westwards, then runne to that land in tenne or twelve fathome. When you sail towards the south point, & come somewhat near the land, you shall espie a rock, like unto a small towre, close by the high land, called the Monck, which is almost so high as the high land. About southsoutheast an English mile, or a little more from that rock, lieth a rock under water. If you keepe your selfe in eight and nine fathome, then you runne without this rock, and cannot take hurt of it: When the Monck is covered of the other land, then you are thwart of this suncken rock. When the foresaid Monck commeth a hand spikes length, past or without the other land, there is the road, and good anckering in tenne and eleven fathome, the ground is there faire and cleane, except it be of wracks of lost ships, or lost anckers, which are there manie. Lying there in nine, tenne or eleven fathome, you have shelter for a westsouthwest, northwest and northwindes. From the point where the Monck standeth by, shooteth of a little riffe from the shoare, which men may sound in three fathome, you may also runne in five fathome from the shoare, and saile cleare of the foresaid suncken rock, to wit, through betwixt the suncken Rock, and the little riffe: but if you runne into deeper water, to wit, in seven fathome, you shall runne right upon the suncken Rock. In eight or nine fathome you doe runne about without the suncken Rock.

From the north side of Holy land lieth off an evill Riffe, almost a league into sea, so that you cannot come no nearer the whole north side, then in nine or tenne fathome. If you will goe about to the northwards of Holy land, being come so farre that the east end of Holy land come to be south and south and by east from you, saile then freely unto the Scolvers point, that is a flatte point, which you may sound in five, sixe, and seven fathome. If so be that you will runne in eight fathome off from it, you shall runne above two great leagues from the shoare. The right farewaie betwixt the Hever and Holy land is not more then nine or tenne fathome deepe. When you come about the point to the road, and that Scholvers point lie northeast, and the Rock southwest from you, there is good lying in 5 fathome. Scholvers

Scholvers point is the point where the South haven lieth within, which lieth from the high land about east into sea. From the outermost end of Scholvers point lieth a banck of three fathome, unto the point where the Monck standeth, within it is verie good lying for ships of little draught, that is called the South haven of Holy land. A south-southwest and northnortheast moone maketh there the higheft water.

Of the Elve.

THe Road of Holy land and the outermost buye of the Elve, (called the Schortunne or the Steepe buye) lie right southeast & by east, and northwest and by west eight leagues asunder, which lieth right to the northwardes of the Schorhorn, that is the outermost point of the New workes grounds, on the south side of the Elve, the right deepe of the Elve runneth in alongst to the northwardes of it. On the northside of the Elve lie the North grounds, which lie somewhat flat farre off to seawardes upō the northwest side. The south end of the Northgrounds called Voghelsand, runneth from the foresaid buye a good wayes west and by north into sea, with a narrowe taile of perfect hard sand, about a halfe league broad, which waxeth by little and little, the farther from the shoare the deeper. Three leagues from the foresaid buye, there is upon it eleven fathome water, when you saile on north from the Steepe buye, you runne over it in three fathome, or three fathome and a halfe, but it doth soone deepe againe in five, seven, eight, and 10 fathome soft ground, that is in the creeke of the North Elve. To the southwardes of that afore said Voghelsand in the right farewaie of the Elve (for him that commeth from the westwardes) it is also somewhat soft ground and fourteene and thirteene fathome deepe, to the southwardes of it, towardes the souther or steepe grounds, the ground is againe verie hard, and the grounds verie steepe, you may not come nearer them (especially by night or darke weather) then in eleven or twelve fathome, if you come nearer to them, you might saile foule of the wester Till, or Souther-Broad-balgh, which runneth up to the southwardes into the grounds to nothing.

When you come from the westwardes and saile to the Elve, you shall finde betwixt Holy land and the Weser, and there abouts somewhat to the eastwardes, depth of twentie fathome, untill that you come well halfe waies to Holy land, toward the Steepbuye, then it doth begin to shold from eightene to sixteene & fourteene fathome, close by the Steep buye it is twelve fathome deepe.

If you come by night alongst by the Steepe or Souther grounds, with a southerly wind in twelve or thirteen fathome, and goe on east and by north you shall at last meet with the showlding of the New-workes grounds, right to the northwardes of the Hondt-balgh in eight and seven fathome, there you must then let fall your ancker, for to stay for the day, and you shall finde your selfe not farre from the buye. With northerly windes you must anker further from the south shoare in the foresaid showlding in eleven or twelve fathome.

To the northwardes of the foresaid narrow taile, or showlding, which lieth off from Vogelsand, runneth in a great bight or Slenck into the norther grounds, called the Norther Elve, it is in the going in somewhat within, so broad, that you may therein turne to windwardes, but within it runneth narrow and sharpe too, and at last to nothing, (ending almost against the white buye which lieth upon the Elve upon the taile of the New-grounds) it is going in more then halfe-waies thirteene and twelve fathome deepe and soft ground, verie much like the right Elve. It happeneth oftentimes by darke weather that the ships (thinking that they are entred into the right Elve, run in there sometimes with great danger, especially with westnorthwest windes, for they must come out there backe againe. When you saile off from Holyland on eastsoutheast, you shall have depth of twelve or thirteene fathome being a league off from it, that

you leese the white cliff out off your sight, then you shall get one even depth of thirteene fathome, and soft ground, all alongst untill you come within the foresaid north Elve. When you shall perceive that you are entred in there, you may (when the New-worke is a little more southerly then southeast and by south from you) run alongst over the taile of Vogelsand in five fathome, and so come against the Steep-buye upon the right Elve.

For to set saile by night from the road of Holyland, the course is southeast and by east, then you shall runne over the foresaid taile of Vogelsand in seven and eight fathome, and somewhat hard sand ground. If you then runne a little more southerly, you shall get againe twelve and thirteen fathome, and somewhat soft ground, that is, the right deepe or channell of the Elve betwixt Vogelsand and the steepe grounds. If you run then more southerly you shall get againe somewhat hard ground of the southergrounds, which are (as hath been heare before said) verie steepe and hard, when you come neere them in twelve or eleven fathom you must edge of againe from them unto twelve or thirteene fathome, and alongst by them towards the Steep-buye, unto the foresaid showlding of the New-workes grounds, and there stay for the day light.

When you come by day from Holyland or from the westwardes, and that you get New-worke in sight of you, bring that and the Cape one in the other, and saile so right in with them, then you shall finde the Steep-buye, which lieth (as hath been already said) towards the south land on the side of the Schorhorn the outermost point of the New-ground in ten or eleven fathome. From the Steepe-buye to the Koolbuye, that is the second buye, the course is due east, which lieth in eight fathome. Vpon the Newworke stand three countrey mens houses, the middlemost of them, and the steeple of the New-worke come one in the other when you come to the second buye. The third buye lieth in six fathome, from the Koolbuye east and by north somewhat easterly, but neereft east and by north. The fourth lieth in five fathome from the third east and by north. Betwixt these buyes a little within the third runnes a deepe creeke eastsoutheast into the New-workes grounds, called the Kinder-balgh, which is wide at the entring in, and at halfeflood well nine fathome deepe, but runneth at length altogether dry to nothing. Hee that commeth running alongst by the South-grounds, might lightly get in there, therefore the third buye lieth a little further off from the south shoare, because men shold avoyd that creeke. Betwixt the third & fourth buye on the northside of the deepe lieth a white buye in three fathome, upon the taile of the New-grounds, which men might saile within, when they come inwards, that you must leave on larboard side, and all the blacke buyes on the starboard side.

The foresaid white buye & the New-worke lie n. n. e. and s. s. w. one from the other, to the eastwardes of it the north side is verie steepe. The fift buye lieth in three fathom and a halfe, or four fathome, & lieth from the fourth due east.

The sixt buye, that is the point buye, lieth in six fathome from the fourth and fift due east. In the right deepe to the northwardes of these foresaid black buyes from the Kool-buye to the point buye in the right farewaie, it is all alongst 6 & 7 fathome deepe. From the point buye to the buye in the Rosse, the course is southeast, which lieth in 7 or 8 fathome, when the Ros beakon commeth to the little steeple of Gron or Groen, then you are thwart of this buye. Halfe waies betwixt the point buye, and the buye in the Ros, lieth yet another buye on the south side, which is there betwixt them both exceeding steepe and neadle too. Right eastsoutheast from the point buye over against the buye in the Ros, somewhat further inwards, lieth a white buye upon the taile of Romaerl plate, which men might at unawares saile within, in foure or five fathome when they saile upwards. When the little sharpe steeple of Woordt commeth to the westwardes of Oldenbroeck (that is a church with two spires upon one steeple) then they are south from

you, from thence inwards you may sound Romaerl plate in six fathome without danger, otherwise it is on the off-side very steepe. From the Ros beakon to Brunsbuttel are five leagues; betwixt the buye in the Rosse and the buye upon Romaerl plate begins a sand lying right in the middest alongst the fareway about two leagues long, called Pilgroms-sand, upon it is all alongst no more then two fathome water, or a little more, upon it lie three black buyes, and over against it on the north side, two white buyes, you must saile through betwixt them, alongst to the northwards of that sand, being past it, you shall come upon the flat. There lie yet two buyes which you must leave also on the starboard side in sailing up, before you come to Brunsbuttell. All the depths here before mentioned, are rekened at halfe flood.

From Brunsbuttel to the buye upon Salshorne, or Vriburgher-sand, the course is east; and east and by north alongst by the northland. From Saltshorne to the buye against the Steur east and by south, and eastsoutheast, from the Steur to the buye upon Gringeroorts-sand southeast, and southeast & by east, that lieth against Bilemburgh more then halfe waies in the deepe. Betwixt this buye and the buye upon the Steur lieth another buye in the fare-way. From the buye of Gringeroort to the buye upon Staderland southeast and by south, and southsoutheast. This buye you must leave on the starboard side. From Staderland to Willemsvliet, or the buye upon the Luye it is southeast, and southeast and by south, and from thence to the buye upon Terloo eastsoutheast. From thence to the buye upon Haneball, the course is east and West. From Haneball to the buye upon Blankneffand east and east and by north, you must keepe that buye right with a great tree, and then run alongst by the north land untill you be past the buye.

From Blanckneffand unto the buye in the bight, the course is e. f. e. & from thence unto the Eckhout east & by north in the right channell it is there 3 or 4 fathome deepe, there lie the great ships for to lade and unlade.

The Eyder.

Six leagues to the northwards of the Elve lieth the Eyder, with many showlds lying far out without the land, chiefly and most on the south side: on the northside of the deepe alongst by the land of Eyderstee lieth a long sand called the Broad-back, or New-grounds, on the south side lie Blavoort, the Iron Hendrick, the Hondt & Hecksand. To the southwards of Blavoort, and the Iron Hendrick, about a league to the southwards of the mouth of the Eyder, goeth yet a Deepe in, called the North Pipe, where men may saile in, & come out againe by the Hondt upon the Eyder. In the Eyder lie on the southside of the Deepe seven black buyes, which you must leave all (in sailing in) on the starboard side, and on the north shoare, which you must leave on the larboard side. The outermost buye lieth from the steepe buye right north, and from Holyland east or a little more northerly 7 or 8 leagues. When you fall with the land with that course, you shall espie to the northwards of the Eyder, upon the land of Eyderstee, a sharpe steeple indifferent high, called Gardinghen, bring that over or to the south side of the little sandhills lying on the northside of the Eyder, called the Souther Heads, they shall then stand from you northeast and by north, or a little more easterly, saile right in with them so, and you shall fall with the outermost buye, when that then the sharpe steeple of Wellingburen, standing to the southwardes of the Eyder in the land of Ditmarsen commeth to be east or a little more southerly from you, then you have the length of the foresaid buye, & the S. Peters church upon the Eyderstee to the westwards of Gardinghen, not farre from the sea side, shall stand from you northnortheast. Thus or comming out of the south-west upon the foresaid marks of Gardinghen, and the Southerheads, you shall runne over the showld of Blavoort, which men do call also the taile of the Hondt lying of from Blavoort almost halfe waies to Holyland. It is also by some called Blavoort. Or comming from the northwards, bring

the foresaid steeple of Wellingburen east or a little more southerly from you, and saile so right in, untill that Gardinghen commeth to the foresaid Southerheads, or that S. Peters church bee n. n. e. from you, in doing so, you shall not misse also the outermost buye. From the outermost buye to the second, third and fourth, it is all one course e. f. e. the second lieth upon the showld of the channell at low water in 16 foot, the third in 4 fathome and the fourth in 5 fathome.

These three last lie alongst the north side of Blavoort, on the south side of the deepe. In sailing in you must leave them all on the starboard side, and runne alongst to the northwards of them. From the fourth to the fift, that is, the buye upon the Hondt, the course is east, which lieth thwart of the Hondt, on a point which lieth of from Heckesand, which in comming in men might at unawares saile within alongst to the southwards of the buye, therefore you must leave that also (as well as the former) on the starboard side, and saile alongst to the northwards of it. Betwixt this foresaid buye upon the Hondt, and the fourth, lieth another buye upon the north side of the deepe, upon the southermost point of the Newgrounds, which you must leave on the larboard side, and runne about to the southwardes of it. From the buye upon the Hondt to the sixt, the course is northnortheast, and two fathome deepe. From the sixt to the seventh and last buye northeast and by north, and the deepe alongst to the northwards of it three fathome. Being past the last buye, follow the beakons which stand alongst on the north shoare, untill you come to Hulck, run close alongst to the southwards or to the eastwards of them for to avoid a taile of sand which commeth of from the east shoare, which men might unawares saile within into a Dead-creeke. From the Hulck to Schulperzile the course is eastsoutheast, in that reach the beakons stand on the south side upon the Ballast plate, & you must run along to the northwards by them leaving them on the starboard side. From Sculperzyle to Tonninghen the Eyder is at the showld, and a low water no deeper then one fathome and a halfe.

From thence further in towards the New-town called Frederick-stat, there is depth enough. The depths here before mentioned are all to bee understood at a low water. From Toninghen towards Wollersum the Eyder lieth alongst northeast and by east. From Wollersum towards Harebleck northnorthwest. From Harebleck towards Reymers-bode northeast. From Reymers-bode towards Nyenzyle eastsoutheast. From the Nyenzyle to the Nyen-Veere south.

Betwixt the fourth buye upon the Eyder and the fift, that is, the buye upon the Hondt, over against the buye upon the southermost point of the Newgrounds, stand two beakons a little to the southwards of the foresaid 2. buyes, the westernmost upon the east point of the Blavoort, or the Iron Hendrick, & the easternmost upon the taile of the Hondt. Betwixt these two beakons goeth in through a deepe southeast, or southeast and by east, where you may saile through alongst by the beakons upon the Iron Hendrick (which you must leave then on the starboard side) untill you come into the end of the North-pipe, which lies from thence about west into sea. You may sound in at the North-pipe, comming in out of the sea by the south shoare in 3 & 4 fathome, untill you come to the foresaid beakons and then about by them northwest or somewhat more westerly up unto the Eyder, or els you may runne further alongst by the foresaid south shoare, untill you come about the beakon upon Hoedmersand, and then forth betwixt the little Iland Bulheads and buyen, alongst by the beakons upon Hoedmersand, with many points and bights on to the southwards, and come out at last upon the old Elve, about northeast from the New-worke against the New-grounds, which is not wel to be sailed, but of those that are there very well acquainted.

Alongst by the north shoare of the Eyder, close to the southwards of the little sand-hills, the Southerheades, runneth in yet a Land-deepe, east and east and by north, in and commeth

commeth out againe upon the Eyder by the Hulck, that serveth not but onely for small shippes, there remaineth at low water but five foot.

Of the tydes, and course of the streames.

BEfore the Weser and Elve, and also in the Eyder a south & north moone maketh high water. The flood commeth there out of the northwest, and the ebbe out of the south-east, and fall very strong over the grounds that lie out there.

Vnder Holyland a northnortheast and southsouthwest moone maketh full sea.

Depths and grounds about these places.

THwart of Botjadigerland, Keidingerland and Ditmarsen, the grounds lie so farre without the land, that you cannot see the coasts except you climbe up into the top.

About Holyland it is deepe 7, 8 and 9 fathome, to wit, on the inner side, but without on the west side 15, 16, 18 and 19 fathome, in such depth you may see the land of Holyland from the Westwards.

Courses and distances.

From Wrangeroogh to the New-worke eastnortheast 8 leagues.

From the outermost buye upon the Elve to the Eyder, north 7 or 8 leagues.

From Langheroogh to Holyland northnortheast 10 leagues.

Holyland and the outermost buye in the Weser lie north somewhat easterly, and south somewhat westerly. The buye upon the Head in the Weser and Holyland lie north

and south asunder

8 leagues.

The steepe buye on the New-worke and Holyland lie south-east and by east, and northwest and by west asunder 8 leagues.

The outermost buye in the Eyder and Holyland lie east somewhat northerly, and west somewhat southerly asunder 7 or 8 leagues.

From Holyland to the Holmes before Yarmouth the course is westsouthwest, or somewhat more westerly 72 leagues.

From Holyland to Scarborough and Flamborough head, west or somewhat more southerly 93 leagues.

From Holyland to Tinmouth, or New-castle, west somewhat more northerly 106 leagues.

From Holyland to Leith in Scotland west and by north and somewhat more northerly 120 leagues.

From Holyland to Boeckenes northwest and by west 122 leagues.

From Holyland to Hanglip in Hitland northwest 146 leagues.

From Holyland to Bovenberghen north and by west 50 leagues.

From Holyland to the Horn, or Dodebergh north 32 leagues.

From Holyland to Knuyts-deepe, or Ryper-deepe the course is north, and north and by east 25 leagues.

From Holyland to the Deepe of Silt, or Lift, north and by east 19 leagues.

From Holyland to Ameren or Small-deepe, the course is northnortheast somewhat easterly 10 leagues.

From Holyland to the outermost buye in the Hever north east 8 leagues.

When you lie by the outermost buye in the Hever in cleare weather, you may see Holyland.

How these foresaid lands doe shew themselves at Sea.

White Cliffe.

Langeroogh sheweth it selfe thus when you are about two leagues off from it.

Holyland north east and by east from you sheweth thus.

Holyland north east and by east five leagues from you, sheweth it selfe thus.

Thus sheweth Spikeroogh when it is about two leagues from you.

Thus sheweth Wrangeroogh when it is about two leagues sheweth off from you.

Thus sheweth the New-land, or New worke when you are at the entring of the Elve.

C H A P. V.

The Coasts of Iutland betwixt the Eyder and the Horne, or Dodenbergh.

From the new-worke, or Steepebuye to the Hever, the course is north 10 leagues, when you come about halfe waies betwixt them both, you shall meete with the foresaid sand or taile of Blavoort in the depth of two or three fathome. In this fareway you must be verie carefull of your tydes, that you come not upon the grounds, which lie farre out a seaboard the land, the foreflood falleth there verie strong thwart over the grounds towards the land, and the ebbe to the contrarie.

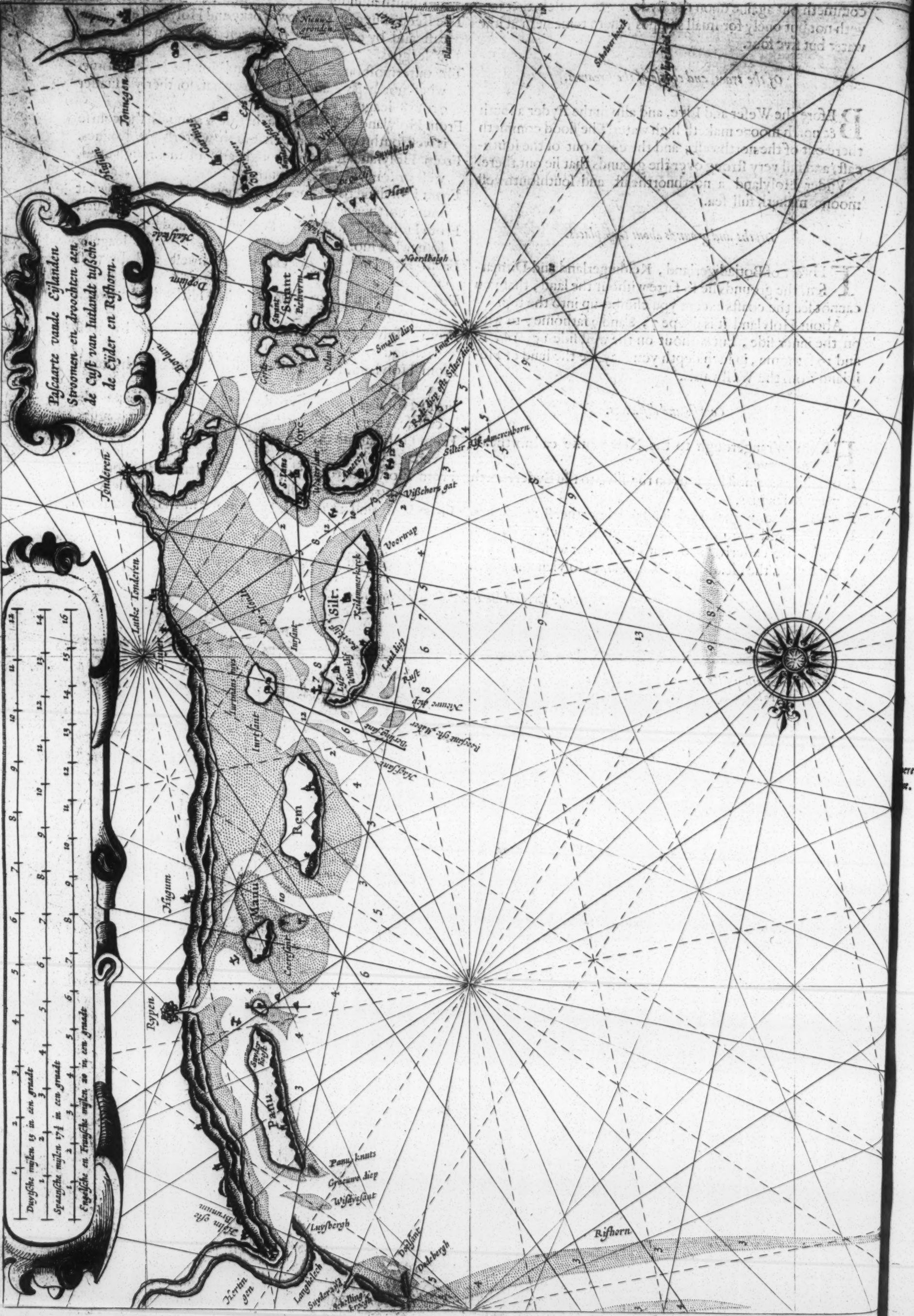
For to saile from Holyland to the Hever, goe on north-east somewhat easterly, or according as the wind and tyde shall be, and runne towards the grounds, untill you come in six or seven fathome, and then you shall espie a steeple which is sharpe, and indifferent high, called Pielworme, bring that northeast and by north from you, a mast length to the southwards of the southermost Cow-house upon the little Iland Nuball, keepe that so standing, and saile towards it, and you shall so finde the outermost buye, from that to the second buye goe on n. e. and n. e. and by east; being come to it, Pielworme steeple shall stand northnortheast from you. From the second buye alongst inwards, the course is northeast and by east. Being come in so a good waies, you

shall finde two beacons on the starboard side upon a dry sand called the Quade, there over against commeth the North Balgh in the right Hever. From the first beakone to the second and third the course is east and by north, saile all alongst by the beacons, leaving them on the starboard side. To the northwards of them, betwixt the first & third beakon, it is full of sands and plates, where you might at unawares saile within. By the third beakon commeth the souther Balgh into the Hever. From that third beakon to the two other beacons, the course is n. e. and by east, being past that, you shall come by the greene land on the starboard side, there it is a square, deepe, large and broad channell, from thence you may saile alongst amidst the channell unto Hoefem at the bridge, or ancker there abouts everie where, where you will.

Without in the Hever the north side is steepe, therefore keepe the south side untill you come within the beacons, in the channell it is at halfe flood two fathome and a half water, and without the channell it is verie farre flat. Somewhat without the Hever lieth also a banck, whereof men must bee carefull, when they will saile in there. A south & north moone maketh there the highest water.

The South Balgh goeth in to the southwards of the foresaid banck the Quade, in right with the little Iland Vtto, and alongst to the northwards of it, it is from without a league and a halfe to saile to Vtto. From Vtto it lieth in alongst northeast and by north, and commeth out into the Hever by the third beakone.

The North Balgh lieth in to the northwards of the Hever about



Pyſcaarte vande Eylanden
Stroomen en droochten aen
de Cuſt van Inlandt tuſſche
de Eyder en Rijnhorn.

Duyſche mijlen 15 in een graad
Spaenſche mijlen 17½ in een graad
Engeliſche en Franſche mijlen 20 in een graad

ver about east and by north, or west and by south from Pielworme, right in with the foresaid little Iland Nuball, which you must leave on the larboard side running in alongst by it, and so come into the Hever, against the foresaid dry sand the Quade: you may also (comming in at the North Balgh) saile up to the northwardes from the Iland Nuball, unto the end of Strant, till you come thwart of a flat church, and ancker there behind the showlds, that is a deepe Balgh or Creeke.

Smalle-deepe.

THree or foure leagues to the northwards of the Hever: lieth the Smalle-deepe. For to saile off from Holyland towards it, goe on northeast and by north, and runne to the grounds, about west and by north, from Pielworme, the south end of Ameren shall then be north or thereabouts from you. Seeke then to the south grounds, and sound about by them, and there you cannot doe amisse it is a flat rising ground farre without the land. On the north side lie many sands, showlds & points, that lie out, which men might (without good heed-taking) saile within: saile in therefore alongst by the south side north and by east, north-northeast, and northeast and by north, and so you shall finde one showld or beach, leave that one the larboard side. If you leave that on the starboard side, you should runne into a dead Balgh, or creeke, wherein is at the first at least seven fathome depth, but runneth at last by little and little to nothing: you may also runne along by that foresaid showld by your lead, untill you come within it, comming then thwart of the south end of Ameren, you might unawares saile within the south grounds behind a share which shooteth off from the grounds of Vooren, therefore keepe the south side untill that you come thwart of the Iland Vooren.

The Reed-deepe.

For to saile in at the Reed or Silterdeepe comming from the northwards, or out of the sea, run in sight of the Iland Ameren. About the middest of Ameren lieth a white round hill a little higher then the other Hommocks in a low plaine valley. Bring that northeast from you and run in so right with it untill you come within the riffe that shooteth off from the Voortrape, and commonly is called Ameren Borne, and so you cannot take any hurt of it, and then you shall have upon the point of the Riffe not lesse then three fathome water, and within the same Riffe eleven, twelve, or thirteen fathome. Saile so in untill that the north end of Ameren bee north and by east from you, and then run right with the north end of Ameren, untill you come within the dry sand, and there you may ancker where you please, or saile so farre in as you will, and sound it all alongst by the Riffe. The strand of Ameren is a faire strand without any tiales that men might saile within. When the foresaid hill upon Ameren is eastnortheast from you, and saile so right with it, then you runne to neer the foresaid Riffe of Silt, the hill is then also in two parts, the northermost is then the smallest.

For to saile in at the Reed-deepe, or Silterdeepe comming off from Holyland, and that you have gotten sight of the land, then bring the north end of Ameren north and by east from you, untill that you become in betwixt Ameren and the Riffe of Silt, run then in alongst by the strand of Ameren untill you come about the north point of Ameren, and so long to the eastwards, untill that Ameren lie south and southsouthwest from you. You may not saile into this channell further to the eastwardes, for then you come against the Iland of Vooren, but you may saile to the northwards alongst betwixt Vooren and Silt, till you come before Lift. In Silterdeepe is upon the showldest three fathome water, being over it, there is againe eight, nine, ten, and twelve fathome. There lie two risses, or bad sands, the one about westsouthwest from Ameren dry above water, that is, verie far flat, to wit, in three, foure, or five fathome, it is called of the Iuthes the Borne, or Ameren-Borne, although

that it be not fast to Ameren, for the Red-deepe goeth in betwixt them both. It is not also fast unto the Voortraps, or that south end of Silt, although it commeth shooting off from it, betwixt them goeth out into sea a deepe of about a fathome and a halfe, where the Fishermen doe daily goe out through for to fish, especially those of the Iland Vooren, this is the outermost sand that lieth on this coast. They that use this coast much, either for Rypen, or the quarters there abouts are verie much afraid for this Ameren-borne when they come off from Holyland, they finde this showld about westsouthwest from Ameren.

The other sand shooteth off from the south end of Ameren, lying about south, and south & by west into sea alongst the land, that is also called by many the Born, or Ameren Born. He that commeth off from Holyland, and is bound to the northwards, need not feare so much for the showld, for it shooteth out most by the land.

The Haven of Lift.

ABout eight leagues to the northwards of Silter-deepe lieth the Haven of Lift, which runneth in by the north-end of the Iland Silt. For to saile in there comming from the southwards, run so long to the northwards in 6 or 7 fathom, that you may see a little Iland without the point (which lieth within these outer Ilands) upon which standeth a house called Ieurtmans-house: when that house commeth a mast length without the point of Lift, then go in east & by south, and eastsoutheast, keep those markes so standing, untill that you be within the point of Lift, edge then up to the southwards about the point, and ancker before the Vochts house, there it is 9 and 10 fathom deepe. At the entering of the channell lieth a plate or sand called Haef-sand, *Haef-sand.* that you must leave on the larboard side, when you come in, it is on the off-side very flat, & good for to sound when you come from the northward. For to avoid that when you come from the northwards, edge off so far from the shore that the red clifft come without the sandhills, or that you may see it plainly: then you may go well over Haef-sand with a ship that is not of a very great draught. Likewise when you come out at the channell of Lift, & are bound to the northwards, saile so farre out that you may see the cliffe, and then you may goe over the foresaid sand, which lieth from the south end of Rem a good wayes into sea.

On the south side of the channell of Lift lie also two sands or bancks alongst the shoare, not very farre without the strand, the innermost or northermost is called Barling sand, *Barling sand.* and the outermost, Rust, or Rusting, that lieth to the southwards almost thwart of the red clifft, betwixt these sands, & the strand of Silt goeth in the Land-deepe. For to saile in there comming from the southwards, you must seeke betimes to the strand of Lift about the red clifft, because of the Rust which lieth off from the northend of Lift a little without the strand. When that you have the sounding of the shoare and are come somewhat within that red clifft, there shal meet you a flat from the shoare, which you must somewhat avoid, and then you may sound it very well: keepe all alongst the foot strand, there you can take no hurt of it. From the Inner point of Lift shooteth off also a little riffe, wherof you must take heed. When that you are come within the Innermost point of Lift, then you may ancker where you please. If you will goe to Lutke Tonderen, then leave that sand (which lieth to the southwards of Iuresand) on the starboard side, and runne through betwixt them both. He that is bound to Hoefem or Silt over the Wadr, must leave that sand on the larboard side. Vpon Vooren stand two or three trees, these you must keepe over the westernmost church or steeple, and run so alongst unto Vooren.

Betwixt the Rust and Barling-sand goeth a faire deepe channell through, called the Newdeepe, right in alongst to the southwardes of Rook-sand, that is, a showld which lieth *Rook-sand.* to sea-wards of Rust and Barling-sand. For to saile in at that New-deepe, bring the white cliffe upon Silt east, and east and by north from you, and runne in so right with it, and you shall fall right in the New-deepe betwixt these two banks,

kes, leaving Rooksand or the Maber on the larboard side of you, run in so alongst by Rust, but come also no neerer to it then in four fathome, untill that you come into the Land-deepe, but comming against the shoare, and getting showlding of the strand, run in alongst by the footstrand on inwards, as is rehearsed in the description of Land-deep.

Betwixt Haef-sand, or Haes-sand, and the Iland of Rem, goeth in yet a little Land-deepe of about a fathom & a half water. The Iland Rem is three leagues long, and very flat on the off-side, so that you shal scarce see that land in fixe or seven fathom.

*Banck of
at sea.*

About eight or nine leagues a seaboard of the Iland Silt lieth another banck alongst the shoare of eight or nine fathom, and is about two leagues long, about so long as the Iland is. Betwixt this banke and the Iland it is thirteen fathom deepe, being in nine fathom a seaboard the Iland Silt, then lieth Holyland about south from you.

Knuys-deepe, or Ryper-deepe.

From the channell of Liff to Knuys or Ryper-deepe the course is north & south about seven leagues, but Ryper-deepe and Holyland lie north somewhat westerly, and south somewhat easterly one from the other. For to saile into Knuys or Ryper-deepe comming from the southwards, run about by the flat of Rem and Manu towards the south end of Phanu, called Souther-head, or Southerheight, and so you shall see two capes upon a dry sand, somewhat to the southwards of Southerhead, bring those capes a little through one another, to wit, the innermost or longest a little or a handspikes length to the northwards of the shortest or outermost, and then they shall stand eastnortheast from you, keepe them so standing, and saile right in with them, and so you shall finde the outermost buye, lying on the north shoare in foure fathom in the channell, called Old Ryper-deepe, leave that buye on the larboard side, and then goe inwards east and by north, east, and east and by south unto the second buye, you must runne also about to the southwards of it, for thwart of it commeth a showld shooting of from the north shoare, from the outermost cape towards the second buye, which you must avoid.

Coersand.

Or keepe the founding of the south shoare called Coersand, & run by your lead first east and by north, then east, and at last east and by south in by it, you shall finde there upon the showldest not lesse then ten foot at low water and a common tyde, there within it is again 6, 7 and 8 fathom deepe. Being past the capes then luffe up to the northwards, about the sand where the capes stand upon, and ancker there where you please, there it is wyd and broad, and also deep and steepe, so that there you can take no hurt. The Ryper ships that are bound out, doe lie there for to stay for a winde. Behind the Iland Manu it is 6 and 7 fathome deepe, there also men may ride, from thence you may go up the deep to Ryper, but not up along to Ryper with great ships, close to Ryper the deepe endeth, so that there is a showld-neck betwixt both, where there is no more then 6 foot depth. With small ships you may also saile about behind Rem towards Iursand, there is at low water about seven foot water.

Comming from the northwards for to sail into Ryper-deepe, you shall also runne on to the south end of Phanu, untill that you shall espie the foresaid capes, and doe then further as is above taught. This channell is not the best channell in foule weather, for it is narrow and farre off showld without it: but when you shall be entred into it, you may easily see both sides breake, if it blow any thing hard.

A southsouthwest & northnortheast moone maketh here the highest water.

The Grouwe-deepe.

About northeast, or northeast & by north from the north end of Phanu lieth a little Hill, called Luysbergh: a little to the northwards of it lieth a long plaine sand-hill, called

Langelegh: from thence lieth the land towards Zuyder-zijt westnorthwest, and eastsoutheast.

Betwixt the north point of Phanu and Langelegh goeth in that Grouwe-deepe. For to sail in there when you come from the southwards, runne alongst the Iland Phanu, and about by the north end of it, (which is farre flat.) When as that you get deeper Water, you shall see three or four Hommocks about northeast from you, upon the high land with a little flat steeple, called Holm, or Bruynum. Bring that little Church a Cables length to the northwards of the Hommocks, goe in then northeast, and keepe the south shoare, until you come within that dry sand, which shooteth off from Phanu, called Smeursand, you may run to that upon your sight without doing amisse, but leave that on the starboard side when you come in. The shoares are thereabouts both of them very steepe as well Wildike, (that is the Plate which lieth in the channell) as also Smeursand, but without the shoares are flat. When you are past the point of Smeursand, edge then over to Wildike, and ancker there untill that you have the lowest water, and then you may saile to Hartingen, and go on foot to Wardt, or Woert, which lieth eight or nine leagues within the land, the river is very crooked, upon the which heare and there lieth a Gentlemans house.

A southsouthwest & northnortheast moone maketh there the highest water, and there it floweth with a common tide about a fathome up and down.

From Phanu to Schellingkroegh it is four leagues, betwixt them lieth Zuyder-zijt a little river of eight or nine foot water. The land betwixt Langelegh and Zuyder-zijt is ragged land with sand-hills, and rough, being grown with spirie grasie, or heath. If you should fall with the land at Zuyder-zijt, & that you could not lead it into the channell, the choose the land of Langelegh, you may run to it without danger, keepe in two fathom and a halfe, and you cannot saile amisse of this Kroegh: for you may found this land all alongst in two fathome and an halfe off from Langelegh untill you come within Schellingkroegh, but if you run in three fathome, or three fathome and a halfe, you shall saile without the drie sand, and runne about a seaboard of the forenamed Kroegh. Schellingkroegh lieth in most northwest, men lie there within sheltred for all windes, like as men doe lie at Coningsborough in the Kettel. If so bee that you come from the northwards, and are bound into this haven or Kroegh, you may run about by that dry sand in three fathom, when you come by the innermost point of that drie sand, there shooteth off a little taile of sand, but you may see it well, and keepe your selfe from it: when you come to the east end of that sand, luffe up about it, untill you come into that Kroegh, and ancker there in two fathome and a foot, it is there very wide, you may make there a good board, and turne it in to windwards. A southsouthwest and northnortheast moone maketh there the highest water, the farther you come to the northwards to Iutland, the lesse tide goeth, and the lesse it floweth up and downe.

At the north end of the foresaid drie sand lieth the Dodenbergh, that is a short hommock of a sand-hill, which lieth alone, when you are somewhat off from it, then it lieth under the other land, that you cannot see it, when you come from the southwards or the northwards you may see it. From the Dodenbergh unto that southend of the drie sand, it is all alongst a faire strandt, and flat ground. For to ride under the drie sand, you may found about it, comming from the northwards, and get smooth water for a northwest winde, and also for westerly windes.

Of the tydes, and course of the streames.

IN the Pipe, Eyder and Hever, a south and north moone maketh the highest water, the flood commeth there out of the northwest, and the ebbe out of the southeast, and so run over the north grounds.

In the deepe of Liff or Silt, a south & north moone maketh the highest water, the flood commeth there out of the north-

northwest, & falleth verie little alongst the land, and the ebbe to the contrary.

In Knuyts-deep, a f. f. w. and n. n. e. moone maketh the highest water. The flood commeth here also out of the northwest, & falleth but a great quarter tide alongst the land, and the ebbe to the contrary.

In the haven of Zuyder-zijt, the Growe deepe, and Schellings-kroegh a southsouthwest & northnortheast Moone maketh the highest water, the flood commeth there also out of the northwest, and falleth over the Reefshorne towards the Iuttish Ilands, and the ebbe againe to the contrarie, off from the land into the North sea.

Of the grounds and depths.

THE grounds of the Hever & the bankes of the Smalle deepe without Strand & Eyderstee, lie at least two leagues without the coasts of the land.

Betwixt Holy land and Ameren or Strandt it is tenne or eleven fathome deepe, in that depth you may see both the lands, if you clyme up in the shroudes. Strandt is to be knowne by the steeple of Pielworme, standing upon the south end of the land: Vpon the Iland Strandt stand more churches and steeples, but none so good to be knowne as Pielworme.

Ameren is a league and a halfe long, and hath all alongst low sandhilles growne with spyrie grasse.

The Iland Silt you may see in tenne fathome: Vpon this Iland (nearest to the north end) lyeth a high steepe redde cliffe, on both sides going flooping downe; upon the south side of the cliffe standeth a flat church with a low steeple, & to the eastwards of it another church, with a high thick steeple called Heydom. The north end of the Iland is called Lift, and the south end Voortrap.

Courses and distances.

FROM the Eyder to the Hever the land lyeth northnorthwest and southsoutheast 5 leagues.
From the Hever, or the south end of Strandt to the south

end of Ameren northnorthwest about 5 leagues.
Two leagues north from Ameren lyeth Silt, which is about five leagues long, and lyeth south and by east and north and by west.

From the north end of Silt called Lift unto the southend of Rim or Rem it is northeast and southwest one great league, Remme is three leagues long, and lyeth most south and north.

From the north end of Rem to the south end of Manu it is northeast and southwest, a league and a halfe, you can hardly get sight of it by reason of the groundes, and great showldes, which lie thwart of it to seawards.

Manu and Phanu lie about two leagues one from the other, Manu is almost a league long, and Phanu about four leagues long, & lyeth from Phanu Knuytes to Knuytes-deepe southsoutheast and northnorthwest. This Iland hath also a fair strand, but the north end towards Growe deepe is verie flat.

From Phanu to the Dodenberg it is about four leagues, betwixt them lie the havens of the Growe deepe and Schellingkroegh.

From Holyland to the Eyder, east & by north, and west and by south 7 leagues.

From Holyland to the outermost buye in the Hever northeast and southwest 8 leagues.

You may lie by the outermost buye in the Hever, and see Holyland with cleare sight.

From Holyland to Ameren or Smalle deepe northnortheast somewhat easterly, & southsouthwest somewhat westerly 10 leagues.

From Holyland to the deepe of Silt or Lift, north and by east 19 leagues.

From Holyland to Knuytsdeepe or Ryper deepe north, and north and by east 25 leagues.

From Holyland to the Horne or the Dodenbergh north and south 32 leagues.

From Knuytsdeepe or the Iland Phanu to the Flie southwest and by south 50 leagues.

From the Iland Silt to the Flie northeast and southwest 46 leagues.

How these foresaid lands doe shew themselves at Sea.

Norther head. Tatinghen. Gattinghen. Southerhead.

Thus sheweth the land of Eyderstee to the northwards of the Eyder.

Lift. Whitecliffe. Reddecliffe. Heydom. Voortrap.

Thus sheweth it selfe the Iland Silt, when you saile alongst by it.

Doodenbergh. Zuyder-zijt. Langhelegh. Luysbergh.

Thus sheweth the land of Zuyder-zijt to the southwards of the Doodenbergh.

C H A P. V I.

The Coast of Iutland from the Horne the Scame or Schaghen.

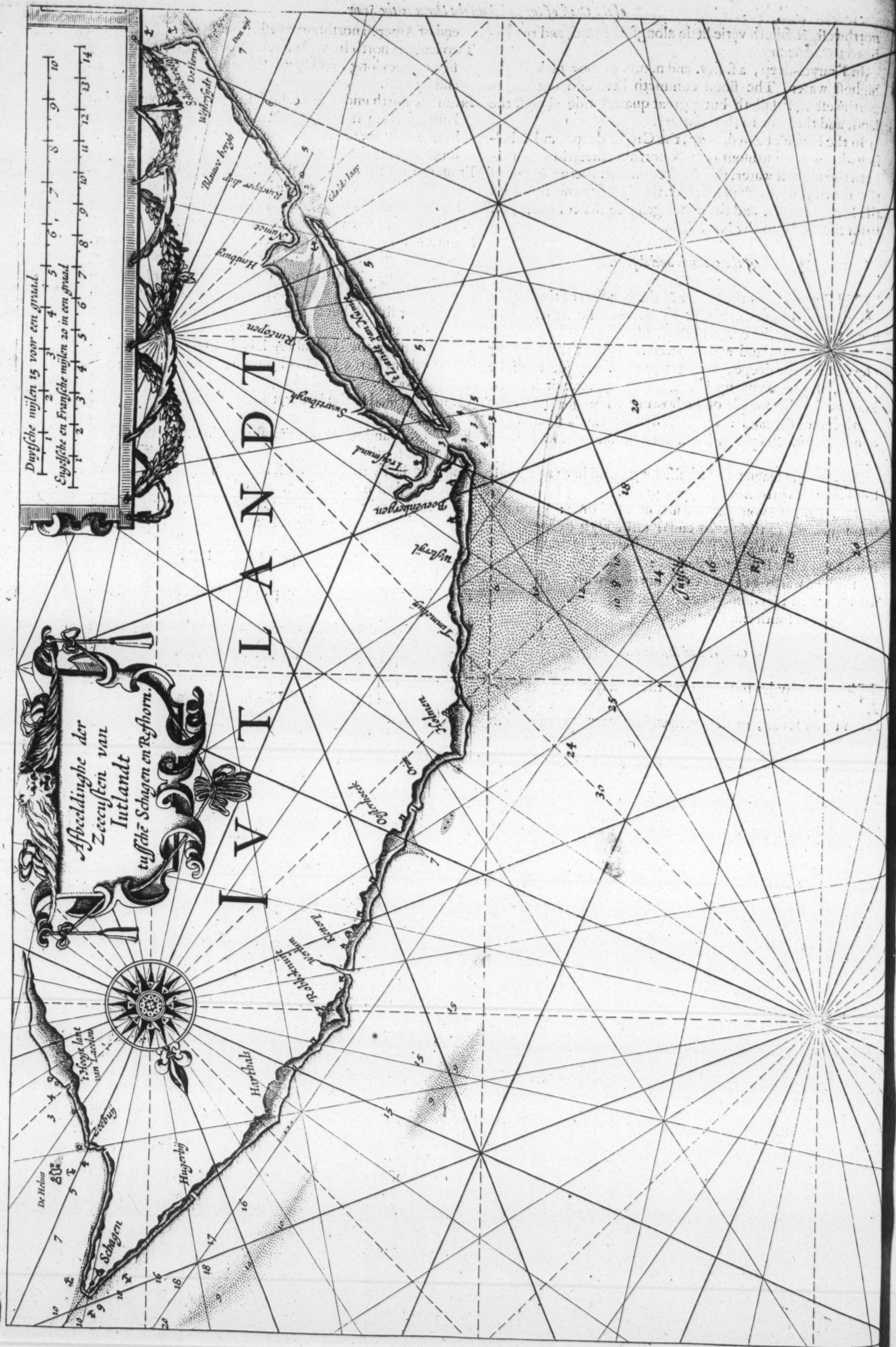


Little to the northwards of the Dodenbergh lieth the point called the Horne betwixt Zuyderzijt and Westerszijt making there a Horne of the land: to the southwards of it the Coast lieth eastsoutheast and westnorthwest towards the Growe deepe: to the northwardes of it north, and south towards Westerszijt. Westerszijt is a village lying betwixt the Blauwenbergh & the Horne.

About this point or Horne runneth off a long banck about twelve leagues westsouthwest into sea, called Reefshorne, or as some do name it Devilshorne, which lieth at some places altogether dry, especially seven or eight leagues from the shoare, where it is not deeper then two fathome and an

halfe, or three fathome a foot lesse. A shippe that sayleth upon it, men can but even see it from the land, it is at the deepest by the land, to wit, four fathome lacking a foot. He that commeth there from the northwards with a ship of great draught, must take verie good heed, for it is upon the northwest side so steepe, that men shall have one cast two and twentie, the next cast fiftene, and the third cast no more then three fathome.

When you fall with the land with Westerszijdt, or to the northwards of Reefshorne, you may sound alongst by the shoare in 6 or 7 fathome, untill you come neare the foresaid Horne: you shall then also finde another showld Riffe, that runneth off from the land, called the Owle, which is also verie steepe on the north side from the northwards you may not come nearer it, then in seven fathome. A little to the southwardes of it, beginneth Reefshorne to runne off from the shoare, is is there a narrowe banck, you shall not finde there lesse then three fathome, or three fathome lacking a foot water,



water, at two or three casts, according as it shall blowe hard or soft, and that you shall make your waie, and then you shall get presently againe five fathome, and sound it about by that shoulde fand, whether you desire to be.

According to the opinion of some, Doggers Sand beginneth from this banck. When men set saile earlie in the morning out of Rinkoppers deepe, with a southwest waie, and a good northeast wind, then they are about four of the clocke in the afternoone yet in nine fathome: whereby it shoulde appeare, that Doggers Sand shoulde have his beginning at this banck.

For to knowe the Land there abouts: About four leagues to the northwardes of the foresaid Horne lieth a high hill a little from the strand, called the Blawenbergh, going plaine downe on both sides: which is somewhat blacker then the other land, being grown with spyrie grasse, to the southwardes of this Blawenbergh lieth that fishers village Westerzijd: betwixt that village & the Horne lieth one blacke hommock, and also a Gentlemans house, other wise the land is altogether full of hommocks.

Rinkopper-deepe.

TO the northwardes of the foresaid Blawenbergh lie three or four lowe white Sandhilles, and by the haven of Numen also two great white Sandhilles close one by the other. To the northwardes of these sandhilles runneth in that haven of Numen, the land lieth betwixt the haven of Numen and the Doodenbergh, most south & north about seven leagues, all alongst a faire strand: the best to be knowne of this coast, is the foresaid Blawenbergh, and those two foresaid white Sandhilles.

For to saile into Rinkopper-deep or the haven of Numen, runne alongst by the land of Wester-zijt, in fixe or seven fathome, untill that you come to the two foresaid great white Sandhilles, and then you shall see upon a lowe land two capes, upon each of them standeth a barrell: Bring them one in the other, and then they shall stand north, or north and by east from you, saile in right with them, and you shall finde a buye, except it be laid somewhere els. Right before the haven of Numen lieth a Sandplate, named Gladde Iaep. For to saile into the fouth channel, then leave that plate on the larboard side, & runne in close by the south shoare or foot strand (where the afore said white Sandhilles doe lie upon) righ with the Capes, and there you cannot doe amisse, but runne in boldly by it upon your lead, that is the verie surest waie of all to saile in alongst by the strand, when men are carefull of the lead.

Being past Gladde-Iaep, runne then towards the north shoare, you may saile about by it so close as you will, it is a lowe plaine point, altogether cleane and verie steepe. When you are come within this point, you may ancker where you please. This channell lieth in most north and north and by east, untill you come within Gladde-Iaep, and then somewhat more easterlie towards the foresaid point. In this channell goeth an indifferent strong tyde, because there lieth such a great Sound within. It floweth there little up and downe, no more then two foot and a halfe, with a common tyde. A southwest and northeast Moone maketh there the highest water. Right to the northwardes of Gladde-Iaep runneth in another channell, but there is no more but eight foot water.

Further within the Haven of Numen it is Pilots water, but shippes that are not of great draught may well saile up, especially at a lowe water. The deepe runneth alongst by the strand of Numits, keeping alongst by it you can not doe amisse: so soone as you goe off from it, you shall be in danger to saile within the shares or tayles, which lie off from the Wadt towards the land of Numit, therefore run close alongst by the afore said strand of Numit, so long, untill that a little church with a flatte steeple (about east from you, against the high land of the Holme) come to the south side of the high land: then you are within the tayles and sands that lie out, leave then the strand, and goe in northnorth-east, and northeast and by north, untill that a round hom-

mock come close to the southwardes, or right over a little blew church upon the high land of the Holme. Goe them in alongst northeast and by east, untill that the foresaid little blew church commeth over a Gentlemans house, beneath in the lowe land, close to the water. Saile then on north, and by little and little north and by east, untill you come before Rinkoppen, it is there broad, large and wide, and the right deepe two fathome and two foot.

Rinkoppen and the Havens mouth of Numen lie foure leagues alunder, one from the other.

To the northwardes of Rinkoppen goeth a little river into the land, upon which lie two little townes, seven or eight leagues in the land, the one named Hostebro and the other Huysbuy.

A half league to the southwards of Boevenberghen goeth in yet another little haven inwards out of the sea, named Trosmond, there stand two mastes, you must keepe them one in other, and runne so in to it: there lieth a little village within called Trosmond. From thence you may saile over the Wadt to Rinkoppen.

This little haven is not to be reckoned for a Haven, because sometimes it is cast too, and sometimes there may goe in and out againe Boates or Crayers and small shippes.

From Rinkopper-deepe, or the Haven of Numen to Boevenberghen the land lieth most north and south tenne leagues, there is all alongst betwixt them both a faire strand with white sandhilles, growne with spyrie grasse. When you saile alongst by it, you may see the blew double land of Rinkoppen, (called the Holmes,) alongst over this land.

Betwixt Boevenberghen and the Reefhorne lie some banckes of seven, eight and nine fathome, and also some that are deeper.

Boevenberghen is a long smooth hill, having in the midst a high round hommock or hill, and upon that hill standeth a church with a steeple: when you come thwart to land with Boevenberghen, it sheweth it selfe in three hilles, the middlemost is the highest, upon which standeth the foresaid church, with a flat steeple: upon both sides of that hill stand also other churches, but they are not so high: you may see the land in thirteene and fourteene fathome, the ground is grosse reed sand with some little stones therein.

When Boevenberghen is eastnortheast from you, it sheweth it selfe in a long hill, with some dale in the middest on the north side, with a church, and also a church on the south side; & also another hill to the northwardes of it.

From Boevenberghen to the Holmes the land lieth north-northeast nine or tenne leagues, betwixt them it falleth in with a Bight, it is black land with Hommocks, and sandhilles growne with spyrie grasse, here and there standeth a flat steeple in the land.

About five leagues from land lieth a bancke of tenne fathome, but it lasteth not long before you get againe deeper water.

Betwixt Boevenberghen and the Holmes lieth the great Iuttish Riffe west of into sea, running over it in twelve or thirteene fathome, then lieth the Naze from you, northwest & by north 24 leagues, running over it in seventeen or 18 fathome, you may see the land; on the north side it is grosse sand, on the south side stonie like as pease and beanes.

Westnorthwest from Boevenberghen about eight leagues it is sixteene fathome deepe, grosse stonie sand ground: ten leagues, it is twentie fathome deepe grosse stonie sand, like to pease.

Southwest and by west from Boevenberghen about nine and twentie leagues, it is 25 fathome deepe, reed and blacke sand ground, that is the ground of Doggers sand.

The Holmes is a plaine point, going downe steepe on the northeast side, upon the middest of the hill standeth a square church without a steeple. When that highest of the land is southsoutheast from you, and that you can but even see the north end of it, then it is fifteen fathome deepe, grosse rough sand, with some little stones amongst it.

Two leagues northeast, or as some say, somewhat more easterly, of from the north point of the Holmes: to wit, betwixt the north point and the Holmes, and the easter point,

point, lieth a stonebanck (in manner as the Trindle of Le-
folde) upon which there is no more then twelve foot wa-
ter, so that there remaineth about two third partes of the
water betwixt that Stonebanck and the north point, and the
other third part betwixt the Easter point and the aforesaid
Stonebanck: there have divers shippes beene lost upon it.
The foresaid Easter point lieth about four leagues to the
eastwards of the Holmes, and is also a high steepe point, as if
it were the Holmes. Right thwart of this easter point
shooteth of a riffe almost a league of into sea, which you
may found about in seven fathome. Some say, that men may
sail through betwixt that riffe and the land.

From the Holmes to Robsnot or Robbeknuyt the course
is northeast nine leagues. A little to the westwards of Rob-
snot in the bight towards the easter point, nearest to Rob-
snot stand five churches with flat steeples. There lie also two
blewe lands betwixt the Easter point and Robsnot, in the
bight, you may see also a cloven hill or sandhill before you
come to Robsnot. It is there all alongst a flat strand. To
the eastwardes of the Holmes goeth in a little river called
Misdorp. A little to the westwards of that white cliffe of
Robsnot goeth in also a little river; whereupon lieth a
little towne called Werlom.

Robsnot.

Robsnot or Robbeknuyt is a high round hill, upon the
toppe whereof standeth a church with a sharpe steeple. The
land falleth awaie to the eastwards from this point, with a
great bight towards Hartshals. Thwart of Robsnot it is
farre of flatte, fiftene fathome depth almost three lea-
gues from the shoare. There also thwart of Robsnot about 4
leagues from the shoare lieth a banck of nine fathome, lying
alongst the shoare. Thwart of Robsnot lieth also a rock a-
bout a league from the land.

Hartshals.

From Robsnot to Hartshals it is northeast & by east four
leagues, there standeth a flat steeple betwixt both, nearest
to Robsnot, there you may see the high land of Lackely,
alongst over that high land.

Hartshals is a long smooth hill, which is at the east end
somewhat steepe. Thwart of Hartshals lieth a showlde or
stony ground, about an English mile from the shoare, upon
which (as men say) there have beene shippes lost but men
doe seldome come neare it.

The Scawe.

From Hartshals to the Scawe or Schagen the course is
eastnortheast eight leagues. The land to the eastwardes of
Hartshals is altogether full of hommockes & sandhilles, you
may see the high land of Lackeley also alongst over this land.
Alongst these coastes men finde none such long plaine hil-
les, as are Boevenbergen, the Holmes, Hartshals & Robsnot.
Somewhat within the point of the Scawe standeth a flat
church with a flat steeple, called Old Schaghen, when that
is southsoutheast from you, then there runneth of from the
shoare, a little spitte or showld, there you must edge some-
what of from the shoare, otherwise it is all alongst a steepe
strand betwixt Hartshals and the Scawe, but you may found
about this little sand in four and five fathome, so neare as
you will.

Vpon the east end or outermost point of the Scawe
standeth a firebeakon, like a Cape to see to: when the
church is southwest and by west from you, then are the fire-
beakon and the steeple one in other, and then you are
right thwart of the riffe of the Scawe, which lieth of from
the point eastnortheast, and east and by north almost a lea-
gue into sea.

He that commeth from the westwards, and will faile a-
longst by the land, about the Riffe, must especially be verie
carefull in using the lead, he may take the founding of the
shoare so neare as he will, according as the wind shall be,
in eight, seven, six, five, four, and also well in three fa-
thome, without doing amisse, he need not to feare: If he
be but carefull in using his lead, with a southwest wind, he
may faile about it, in three or four fathome. When the
Firebeacon commeth to the east side of the houses of the
Scawe, then you come against the west side of the Riff,
when the Firebeacon and the church are one in the other,
then you are on the east side of the Riffe. When the Fire-
beacon commeth about halfe waies the houses, nearest the

west side, then you are right upon the point of the Riffe;
what depth that you have then you shall keepe it still, with-
out finding it showlder, whether you faile alongst southeast
or northwest.

He that commeth from the southwards, and is bound
about the Scawe to the westwards may not found the Riffe;
because the south side of it is steepe and needle to, it is not
good to come nearer to it then in twelve, thirteen, or four-
teen fathome, especially by night or darke weather.

For to knowe by certaine markes, when you are cleare
of this Riffe, as well over the one side as the other, then
marke comming from the westwardes, when the old Church
and the Firebeacon are one in the other, then you come
upon the west side of the Riffe: comming from the south-
wardes or the eastwardes, when the Old Church commeth
in the south end of the village, then you come upon the
south side of the Riffe. When the steeple & the firebeacon
are southwest and by west from you, then they are one in
the other, & then you are thwart of that Riffe. When the
steeple is southwest, & southeast & by south from you, then
you are without, or to the westwardes of that Riffe: when
the steeple or firebeacon is westsouthwest and west and by
south from you, then you are within the Riffe. This you
may set by night, by the compasse, & so may perceive, whe-
ther you be within or without that riffe, when the Firema-
ker doth fire well. You may anker on both sides of the
Riffe in seven or eight fathome, and have room enough
to set saile. Some also say, that men may runne through
betwixt the riffe and the land (If need require) in two fa-
thome and a halfe.

Betwixt the Scawe and Maelstrand or Norwaie it is all
soft ground, the nearer to Norwaie the deeper water. When
men come out of the Sound, and are in the farewaie, and
can gette no ground in eightene, twentie, and two and
twentie fathome, that is a signe that they are about the riffe
of the Scawe.

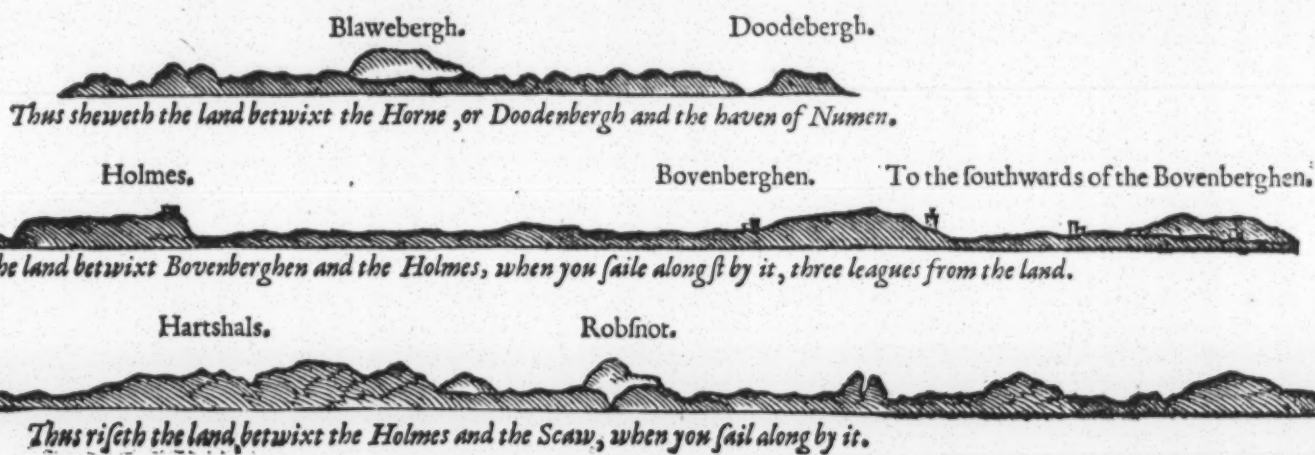
When you come about the Scawe from the westwardes,
and are bound to the Sound or the Belt, you must take an
especiall care of the tyde, that commeth out of the Belt,
which falleth commonly out of the Belt towards Norwaie,
especially when the wind hath blowne a while east or north-
east, it can carrie a shippe by night or darke weather under
Norwaie, before you should thinke of it. It did happen in
the yeare 1605, the three and twentieth of May, that a
shippe comming thwart of the riffe of the Scawe, so that
the riffe did lie southwest from her, did drive with calmes
in eight houres, untill shee came within three leagues neare
to the land of Northeast, about Harmenshooff, five leagues
to the westwards of Maelstrand, so great and strong current
there did shoote alongst by the riffe towards the northeast,
although it doth seldome happen, that the tyde doth runne
there so strong out, yet neverthelesse it behooveth men to be
verie carefull, to consider thereof, and to reckon thereupon.

Courses and distances.

From the Doodenbergh or the Horne to the haven of
Numen or Rinkopper deepe n. and by w. 7 or 8 leagues.
From Rinkopper deepe or the haven of Numen to Boeven-
berghen north and by west about 10 leagues.
From the Doodenbergh to Boevenberghen the land of Iut-
land lieth north & by west and s. and by e. 17 or 18 leag.
From Boevenberghen to the Holmes n. n. e. 9 leagues.
From the Holmes to Robsnot or Robbeknuyt n. e. 9 leag.
From Robsnot to Hartshals northeast & by east 4 leagues.
From Hartshals to the Scawe or Schaghen e. n. e. 8 leagues.
From Rinkopper or Numer deepe to the Flie southsouthw.
or a little more westerly about 58 leagues.
From Boevenberghen alongst Iutland without the grounds
unto the Elve or the outermost buye south and by east
about 50 leagues.
From Boevenberghen to Holyland, south and by east some-
what southerly about 45 leagues.
From Boevenberghen to the Fly or Borneriffe south-
southwest about 69 leagues.
From

From Boevenberghen to the North Foreland southwest and by south	118 or 120 leagues.	From the Holmes to Longfound n. and by e.	35 or 36 le.
From Boevenberghen to the Holmes before Yarmouth southwest	93 leagues.	From the Holmes to Ferderoer northnortheast	40 leagues.
From Boevenberghen to Flambrough Head w.f.w. 100 leag.		From the Scawe to Tynemouth westsouthwest	136 leagues.
From Boevenberghen to Scharbrough westsouthwest somewhat westerly	100 leagues.	From the Scawe to the Naze west	33 leagues.
From Boevenbergh to the River of Newcastle or Tynemouth west and by south about	106 leagues.	From the Scawe to Fleckery west and by north	25 or 26 leagues.
From Boevenberghen to Boecknes west and by north about	106 leagues.	From the Scawe to Reperwick west and by north, and west-northwest	24 leagues.
From Boevenberghen to the Naze northwest and by north	24 leagues.	From the Scawe to Mardowe northwest and by west	20 or 21 leagues.
From the Riffe in sixteene fathome to the Flie south and by west	62 or 64 leagues.	From the Scawe to the Longfound northwest and by north, or a little more northerly	21 leagues.
From the Riffe in eighteene fathome to the Strait betwixt Callice & Dover f. f. w. about	120 leagues.	From the Scawe to Ferderoer north & by west	23 leagues.
From the Holmes to the Naze northwest about	19 or 20 leagues.	From the Scawe to Otturen n. and by e.	24 or 25 leagues.
From the Holmes to Fleckerie northwest & by north	19 leagues.	From the Scawe to Maelstrand e. n. e.	12 leagues.
From the Holmes to Mardow north	24 leagues.	From the Scawe to Nidinck east and by south	15 or 16 lea.
		From the Scawe to Watersberghen e. f. e.	19 or 20 leagues.
		From the Scawe to the Trendels southeast	8 leagues.
		From the Scawe, about a seaboard the Trendels southeast and by east	8 leagues.
		From the Scawe to Lefolde or the north end of the Riffe southsoutheast	8 leagues.

How these foresaid lands doe shew themselves at Sea.



The ende of the first Booke.

The second part

S E C O N D B O O K E

of the

S E A - B E A C O N

of the Easterne and Northerne

N A V I G A T I O N,

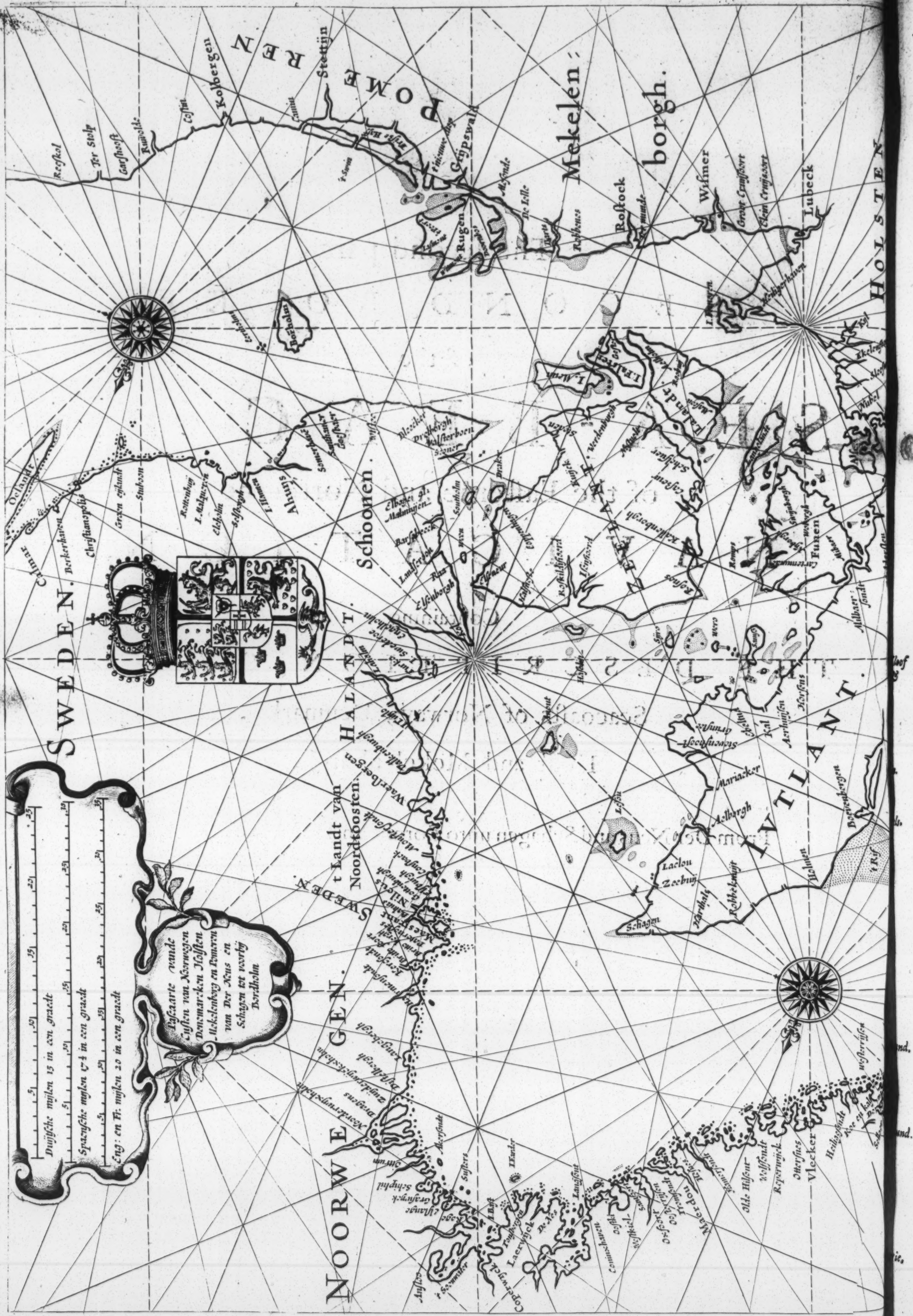
Containing

T H E D E S C R I P T I O N O F T H E

Seacoasts of Norway, Denmarke,

Holst and Mekelenburgh.

From Der Neus and Schagen unto Bornholm and Statyn in Pomeran.



of the

EAST^{to the}ERNE AND NORTHERNE
NAVIGATION,

Conteyning the description of the Coasts of Norwaie, Dennemarck, Holsten, and Mekelenburg, from the Naze and the Scawe eastwardes, about Falsterborne to Brontholme and Statyn.

CHAP. I.

Of the Coast of Norwaie betwixt the Naze and the Longsound.

From the Naze (that is the southermost point of Norwaie on the northsea) westwards, the coast lieth somewhat alongst by the land of Leest, westnorthwest; but to the eastwardes of it (alongst without the rockes, untill past the Iland Fleckerie) eastnortheast about tenne leagues. From thence alongst northeast unto the Longsound about sixtene leagues. This coast is all alongst of high steepe stonie hilles, and without it full of manie rockes verie strange to behold, but it hath manie faire deepe havens, with verie good anckering ground, where is great abundance of timber and boards. The first Haven to the eastwardes of the Naze, is called the Kloof, or the Cowe and Calfe, after two high hommockes good to be knowne, the one some what greater then the other, which lie within the Haven upon the high land, and are so called by the Dutch Shippers. He that will saile into this Haven coming from the westwardes, shall meete with a great rocke somewhat to the eastwardes of the Naze, called Melyn, whereupon is a Warder, being past that he shall finde another outrock, whereupon standeth also a Warder, called Sparrels. Betwixt these two outrockes, he must runne into this haven the Kloof. When he commeth against Sparrels, ther lieth a suncken rock under water whereof he must take heed. Somewhat within Sparrels lieth another Rocke in the faire waie, but above water, which he must leave on the larboard side. In sailing in so, the haven doth open it selfe, by little and little, and so shall come against the Kloof: being come within it, he must edge up to the westwardes, about the point, and ancker there in a sand bay, in fiftene or sixtene fathome, so that the two foresaid hommockes, the Cowe and the Calfe stand about northeast from him.

A little to the eastwardes of Sparrels lieth a haven called Scarfound, or Westrysen, for to saile in there, you must leave Sparrels to the westwardes on the larboard side, and al the great Holmes or rockes to the eastwardes on the starboard side, and runne so inwardes, untill you come into the Haven.

Four leagues to the eastwardes of Scarfound, lieth the Iland Holyfound, whereupon stand two great Warders, you must saile into the westwardes of the Iland, untill that you be within it, and ancker under the foresaid Iland. Thwart of it runneth in a great Sound, into the land, where you may saile in, and where manie shippes lade.

About three leagues eastnortheast from Holyfound, and eight leagues to the eastwardes of the Naze, lieth the haven and Iland Fleckerie, you may saile in at both sides of the Iland, as well from the westwardes, as from the eastwardes into the haven of Fleckerie. The wester-gal lieth in north-northeast. When you come of from Holyfound, then you

see open into the Sound, you must saile alongst by the rockes without Holyfound, untill you come within the Iland Fleckerie, and edge then westward towards the land, untill you come within the Dieveholme, where the gallows standeth upon, and ancker by the west land, in fiftene, sixtene, or twentie fathome: you must bring out there an ancker a head, and make a cable fast on the rocks upon the land. You may runne from thence to the eastwardes of the Iland Fleckerie, out again at the easter gatte eastnortheast into sea, and then you must leave the little Iland with the Warders, which lieth at the east end of the Iland Fleckerie, with all the great rockes by it on the starboard side, and all the blacke holmes on the larboard side.

The Eastergatte of Fleckerie goeth in westnorthwest, betwixt the Iland Fleckerie and the point of Ransound. When you come before it, you may see open into the Vosse. For to saile in there, you must leave all the blacke rocks thwart of the point of Ransound on the starboard side, and the great gray rockes with the little Iland, where the Warders stand upon, on the larboard side: when as you come then by the forenamed Dievenholme, you must runne to the westwardes of it in to the Sandbay, and ancker there, as is before said.

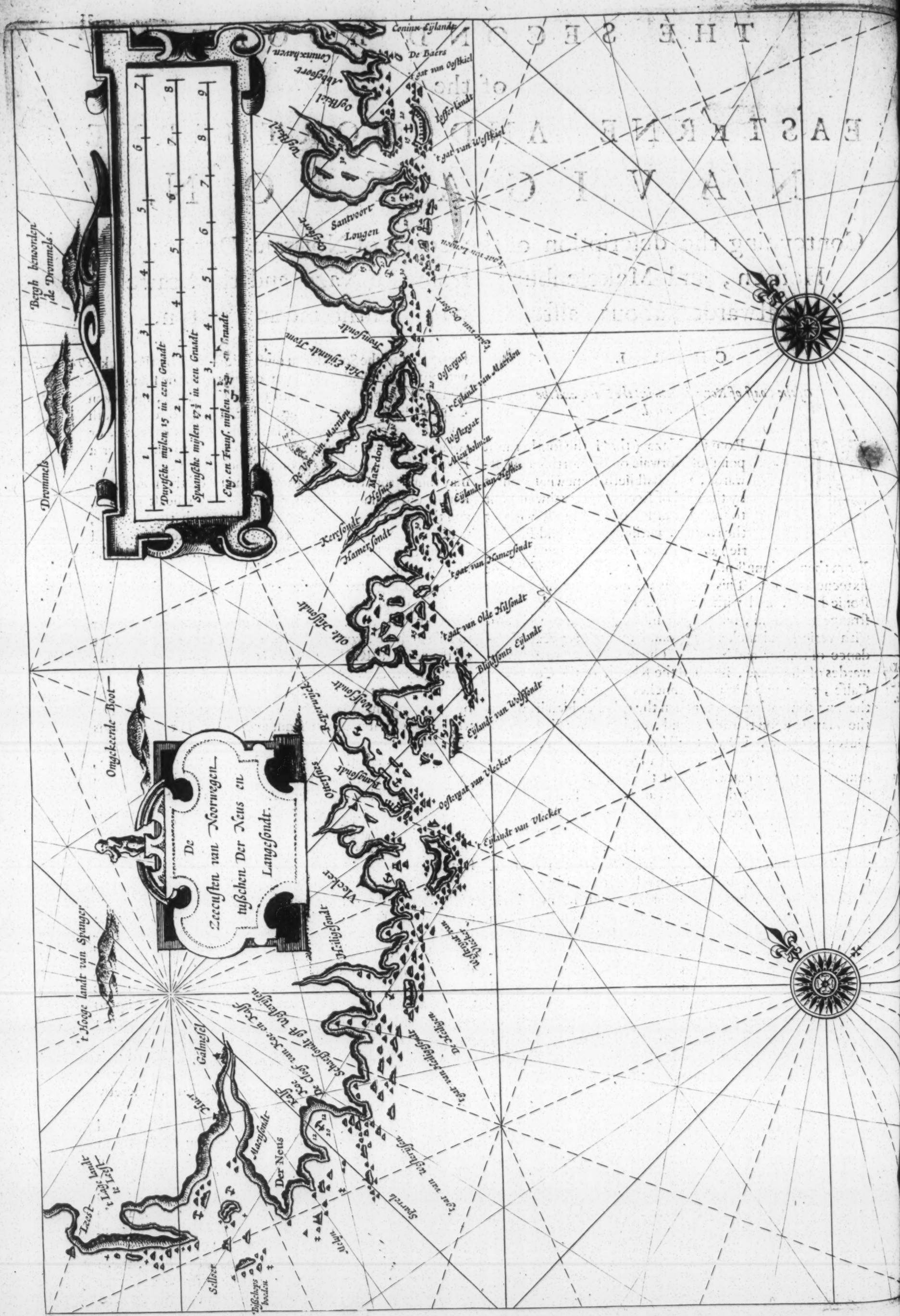
When you are thwart of the Eastergatte of Fleckerie, then there lieth right thwart from you within the land a high round hill, which men doe call the Boat turned up side downe, which lieth out above all the lands there abouts. and coming from the westwardes against Fleckerie, there shewe also three high double lands, which by little and little seem to goe to nothing towards the Drommels.

Three leagues to the eastwardes of Fleckerie lieth Reperwicke, a broad and wide Sound, lying in north, and north and by west. For to saile in there, you must runne in by the land of Wolfound (lying on the east side of this haven) leaving all the rocks, (and also where the masts of Wolfound doe stand upon) on the starboard side, and all the Rocks of Ronfound on the larboard side, untill that you come to the end, or within in the haven, and then you must edge up to the westwardes about the point, and ancker there, that is a good haven for ships that are bound to the westwardes.

On the east side of Reperwicke lieth Wolfound, before it lie two great Ilands, which shewe themselves in high gray Rockes, with three or four Warders upon them, whereby you may knowe them.

Wolfound is a narrow haven for to saile into, there stand two mastes upon the West-land, where you must goe in close by, leaving them on the larboard side, and some little rockes on the starboard side, untill that you come within the great Iland, whereupon the great Warders stand, there you may ancker, and ly landlockt for all windes. From thence you may runne foorth through within the rockes and come out againe into the sea, by the old Hillsound, or you may runne out also at the Eastergatte of Wolfound, there standeth a great Warder on the west side of the gatte, upon a round high rocke, there you may saile out or by it where you will.

To the



To the eastwardes of Wolsound lieth old Hilsound, but betwixt them both, at the point of the west side of old Hilsound lieth the Iland of Blindsound, to the eastwardes of it lie manie great rockes, with two or three Warders upon them.

For to saile into the old Hilsound, you must runne alongst to the eastwardes of Blindsound with the rocks that lie by it, in by the west land, leaving them on the larboard side, and the foresaid great rockes or Holmes with the Warders altogether on the starboard side, there are divers faire Sounds, where men may saile into and ancker in without taking hurt. You may edge up to the westwardes about the point, and saile through betwixt the Ilands, that you can not see the sea.

To the eastwardes of old Hilsound lieth Hamersound, lying in northnortheast. On the westside of the havens mouth lieth a suncken rocke which you must avoid, and saile close alongst by the Iland, which lieth on the east side of the havens mouth, and ancker behind the Iland right against the Warder, in thirtie fathom. The eastergatte lieth to the eastwardes of that Iland, in and out northwest, and southeast: upon the west side lieth a rocke with a Warder.

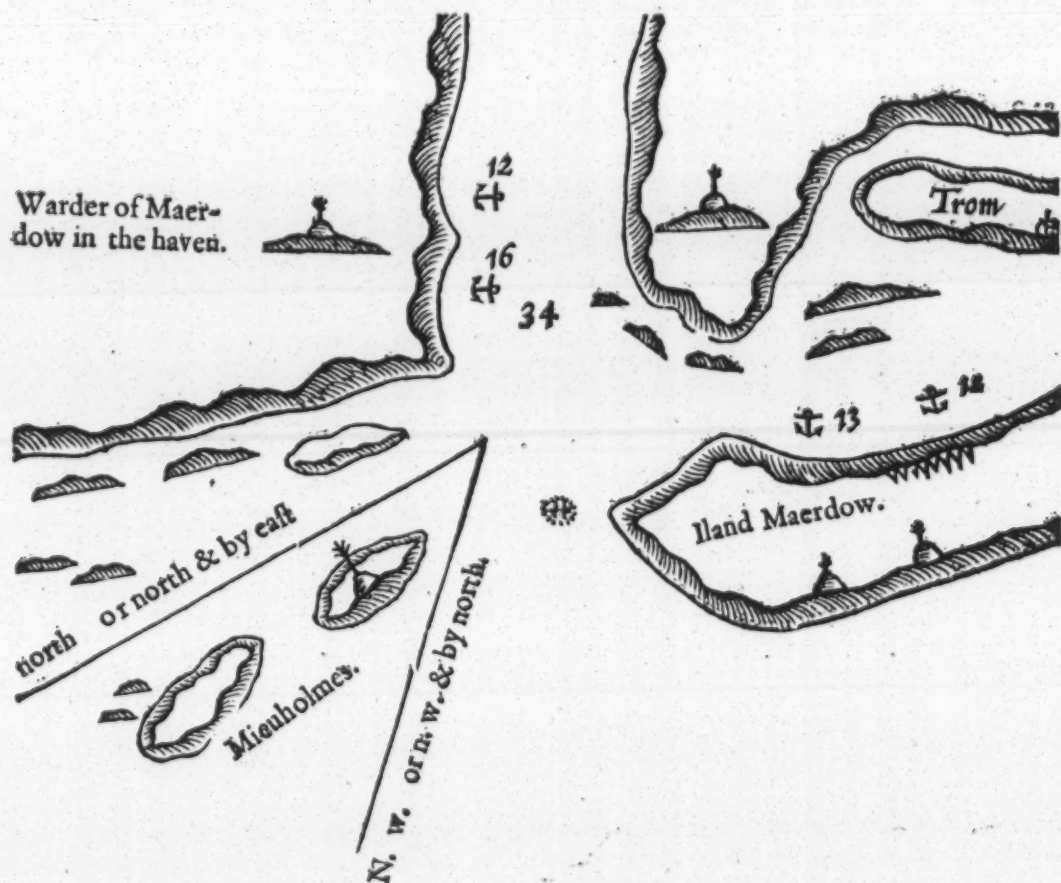
To the eastwardes of Hamersound, men doe goe into Kerck sound, and then a halfe league more to the eastwardes lieth the haven of Hefnes. Vpon the Iland of Hefnesse

stand two Warders: thwart of them it is verie deepe, but towards the little church it is shoulde, to wit, about thirtie fathome: the out rockes thereabouts are all redde of colour.

On the west side of the havens mouth lieth a suncken rock under water, called the Koenaghle, upon the land stand two little mastes, when they come one in the other, then you are thwart of the Koenaghell. The two foresaid little mastes stand upon a gray Holme, leave that on the starboard side, and goe so still inwards, there it is high land, & the Drommels lie from thence northnorthwest within the land, there you may saile through within the rocks, untill you come into Maerdow.

The Iland Maerdow standeth (upon the top of it) full of trees, and round about it, are all bare rockes. On each side of the Iland goeth in a channell. The westergatte or channell goeth in to the westwardes of the Iland, and the Easter gatte to the eastwardes of it. For to saile into the westergatte, you must leave the Miewholmes (that are a few rockes and Ilands to the westwardes of the Iland of Maerdowe) on the larboard side, and the Iland on the starboard side, and run in so betwixt them both north west and by north, but with a southwest wind, you must saile in northwest. Vpon the Northernmost Miewholme standeth a Warder.

The Haven of Maerdow.



Thwart of the west end of the Iland Maerdow lieth a sunken rock under water, whereof you must take heed, when you saile in thus to the eastwardes of the Miewholmes. When you are come within the foresaid west point of the Iland Maerdow, you may runne up towards the northeast behind it, & ancker in 12 or thirteene fathome, or saile up towards the northnorthwest into the Sound, and ancker there on the west side in 16, 14, or 12 fathome; according as you saile farre in. In the going into the Sound, or haven, it is 34 fathome deepe.

With a bare wind, or otherwise, you may saile also into this westergat of Maerdow to the westwardes of Miewholmes, thus: To the westwardes of the southermost Miewholme, not farre from it, lie two little rockes, even above water, & a little further off from it two other rockes which are somewhat greater, you must runne in amidst the channell through betwixt them, leaving the two smallest lying on the starboard side, and the two greatest on the larboard side, that channell, lieth through most north and north and by east. Being come to the end of the Miew-

East. water 2. booke.

holmes, you may saile up either towards the northeast behind the Iland Maerdow, or westwards into the haven, as is before said. There goeth sometimes a good tyde out of this haven, and the westerly windes doe blow commonly out of this channell betwixt the high lands, therefore he that will come in here with a westerly wind, must be verie carefull, and keepe up his topsailes, or els he should lightly not be able to get the haven, but drive out of it against his will.

The Easter-gat lieth in w. f. w. there lieth a sunck en rock on the starboard side, when you saile in therefore you must run in close by the Iland. It is not deeper there in the or channell then three fathome, but being come within it, you shall finde it deeper, you may ancker there under the Iland in 12 or 13 fathome, or you may run up to the westwardes into the Sound, as is before said. To ancker under the Iland there is the shouldest water, but with a n. w. or n. n. w. wind, it is not so good to come from thence as out of the haven, but with an easterly winde it is better to set saile from thence, and to get into sea. When the Drom-

mels

Markes of Maerdow. mels are n. w. and n. w. and by north from you, then you are right thwart of Maerdow. If you run in so out of the sea, right with the Drommels, you shal fal right with Maerdow, that is a certain marke to know whether you be thwart of Maerdow, or to the eastwards or the westwards of it, but when you are close before the land, or before the havens mouth, you cannot see the Drommels, because they are then hidden of the cliffe land.

Tromfound. About halfe a league to the eastwardes of Maerdow standeth a little white Church upon the sea side, to the eastwards of it goeth in the Trom-sound, being a faire Sound. Without in the comming in, stand on the east or north side two Warders upon a high hill, you must saile in by them, and thwart of them you may also ancker, and from thence you may saile in further behind the Iland Trom, and the land of Maerdow, untill you come into the Sound of Maerdow.

Oxefoort. About a league to the eastwards of Tromfound lieth the haven of Oxefordt, which is a great broad, and large Sound, lying in first without betwixt the rocks, north. Without in the comming in to the westwards of the havens mouth, lieth a long rock, which you must leave on the larboard side, and somewhat past that long rock lieth a suncken rock which you must leave on the starboard side, and runne in still north unto the west point of the land, thwart whereof lieth a suncken rock which you must avoid, when that you come then within the west point, you must saile in north-west and northwest and by north, and anker on the north-side of the haven, there it is wide & broad, with many bights, where you may ancker everie where in 20 and 25 fathome.

Longhen. A league to the eastwardes of Oxefordt lieth Longhen, before it lieth a little round Iland or rock on the east side of the haven, upon which standeth a mast with a barrell upon a Warder. For to saile in there, you must runne in close by that land where the Warder with the barrell standeth upon, close longst by the Warder, but there standeth a hand on the starboard side of the havens mouth, which pointeth that there lieth thwart of it a suncken rock under water, there you must edge somewhat of from the shoare. Being within there, you may run to the eastwards againe into sea, and come out in the Sound of Sandfordt.

Markes of Oxefoord & Longhen. When you are before Oxefordt & Longhen then the Drommels lie about w. h. w. from you.

Sandfoort. A great league to the eastwards of Longhen lieth Sandfort. For to saile in there you must leave all the little rocks on the starboard side, & run so alongst by the land untill

you come within the Longholms which remaine on the larboard side, and then right into the Bight. This is a faire haven, men come into it from the eastwards. Thwart of Sandfort lieth a banck at sea, which at some places is not deeper then 3 or 4 fathome, & lieth alongst to the eastwards untill thwart of Westkiell.

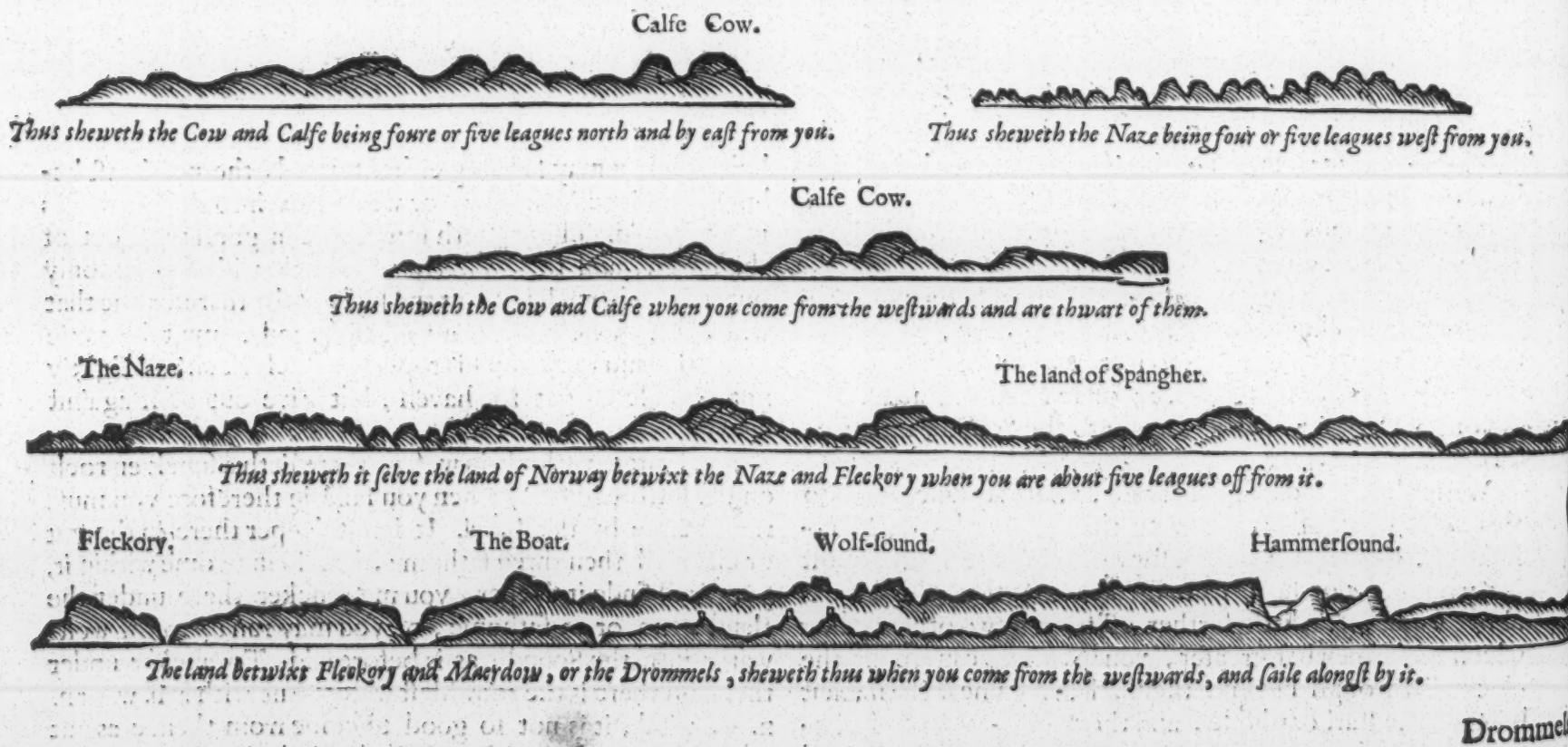
A league to the eastwards of Sandfort lieth the haven of Westkiell, a little to the eastwardes of it lieth Iofferland. For to saile into Westkiell, you must leave all the great rocks (which lie of from Iofferland on the starboard side, and all the foresaid little rockes of Sandfort, and also a white holme whereupon a mast standeth on the larboard side, and run in first n. w. and afterwards n. n. w. and at last north, untill you come about the west point, and then you must edge up northwest to the north side of the Ilands which lie within the haven, there is a Vosse, or an Overfall of water there you may ancker in 20 or 25 fathome.

When you come before Westkiell you may see within the land three high hills, and also the high land of Longfound, lying northwards from you, that land is altogether verie good to be knowne, he that seeth it once, and taketh regard of it, shall knowe it verie well another time, when he cometh there abouts.

From the northermost rocks of Iofferland unto the Baers, that is the southermost or westermost point of Longfound, the course is n. n. e. a great league. Betwixt them both lie two havens, Eastkiell and Abbefoort, men saile in there to the eastwards of the out-rockes of Iofferland. From these foresaid northermost out-rockes of Iofferland unto Eastkiell, it is northwest about a league, but to Abbefoort n. n. w. and north and by west also a league. Men may (comming from the southwards, or from Westkiell) saile through within Iofferland, into eastkiell, or Abbefoort.

For to saile through within Iofferland from Westkiell, the Sound lieth through the channell first northeast and northeast & by north, and then eastnortheast, and afterwards again northeast, & then you come to a place where the Sound is somewhat broader, there lieth a suncken rock, which you must leave on the starboard side, and edge to the north shoare. Being past that, you shall come againe in a verie narrow Sound, which lieth through most northeast, and is at some places so narrow, that the yard armes doe almost touch the rockes. Being through that narrow place, you must goe northeast and by east, and eastnortheast, untill you come thwart of the Longfound, then you may saile in there northnorthwest, or saile into the sea as you will: Behind Iofferland you may also anker in 15 & 20 fathome.

How these foresaid lands doe shew themselves at Sea.



Thus sheweth the land betwixt Maerdow and Longfound when you are about Longhen five leagues without the land.

Of the setting of the streames on these coasts.

CHAP. II.

The Coast of Norway betwixt the Longfound and Maelstrand.

Although that the water doe fall up and downe on these coasts of Norway, yet neverthelesse it holdeth no certaine tyde: there goeth at sometimes of the yeare, and especially in the Spring, such a strong current to the westwards alongst Norway, that a ship lying by with a storme out of the south west, shall not drive to leewards, if it can beare faile. The neerer to the land under Norway, the stronger current goeth. This current commeth falling out of the Belt, on against the land of Northeast, and so turneth about alongst by the coast of Norwaie out into the North sea. Read further thereof in the sixt chapter of the first booke.

How these lands doe lie one from another, and from other lands.

From the Naze to Scharefound eastnortheast 3 leagues.
From the Naze to Fleckorie eastnortheast 8 leagues.
From the Naze to Ryperwyke eastnortheast 10 leagues.
From Fleckorie to Ryperwyke or Wolf-found eastnortheast, and northeast and by east 3 leagues.
From Wolf-found to Blind-found northeast 3 leagues.
From Blind-found to Maerdow northeast 4 leagues.
From Wolf-found or Reperwyk to Maerdow n. e. 8 leagues.
From Maerdow to Iofferland n. e. 8 leagues.
From Maerdow to Eastryfen northnortheast 3 leagues.
From Iofferland to the Longfound northnortheast one great league.
From Fleckory to Iofferland northeast 19 leagues.
From the Naze to the Scaw, or Schagen, east 33 leagues.
From the Naze to the Holmes in Iutland southeast 19 or 20 leagues.
From the Naze to Bovenberghen f. e. and by south 24 leagues.
From the Naze to Holyland the course is south & by east, and f. f. e. 67 or 68 leagues.
From the Naze to the Eems f. somewhat east. 75 or 76 leagues.
From the Naze to Bornriffe south somewhat westerly 83 leagues.
From the Naze to the Tessell or Marsdeepe the course is south and by west distant 93 leagues.
From the Naze to Walcheren south and by west 125 or 126 leagues.
From the Naze to the Heads, or the Strait betwixt Callice and Dover the course is southsouthwest, or somewhat more westerly 143 leagues.
From the Naze to the Holmes before Yarmouth southsouthwest somewhat westerly 104 leagues.
From the Naze to Flambourgh-head southwest 100 leagues.
From the Naze to Scarborough southwest 99 leagues.
From the Naze to the river of Newcastle southwest and by west somewhat westerly 104 leagues.
From the Naze to Leith in Scotland westsouthwest somewhat westerly 103 leagues.
From the Naze to Boeckness west somewhat northerly 88 or 89 leagues.
From the Naze to Fairhill w. n. w. 93 leagues.
From the Naze to Hirland the course is n. w. and by west about 100 or 101 leagues.
From the Kloof or the Cowe and Calfe to the Scawe the course is east and by south somewhat easterly 30 leagues.
From Fleckory to the Holmes in Iutland southeast and by south 19 leagues.
From Fleckory to the Scawe east and by south, 25 or 26 leagues.
From Reperwyke to the Scaw east and by south, and east-southeast 24 leagues.
From Maerdow to the Holmes the course is south 24 leagues.
From Maerdow to the Scaw southeast and by east 20 or 21 leagues.

East. waters 2. booke.



He Longfound is one of the fairest havens of all Norwaie, and lieth northnortheast from Iofferland distant one great league. Before old Longfound lieth a high round rocke, whereupon standeth a great round Warder, for knowledge of this haven. Conincxhaven that is the southermost or westermost channell of the Longfound, and goeth in betwixt the westermost rough point and Conings Iland, and then men run alongst to the eastwards of the Baers, which lieth of from the foresaid rough point. For to faile in there, you must run in amidst the channell, and ancker in the Coningshaven in 28 and 30 fathome.

Conincxhaven.

For to faile into the Nesse (that is on the north side behind the eastermost point of Longfound) you must run through betwixt the great rock, whereupon the Warder standeth, and the land of old Longfound, leaving the foresaid rocks on the starboard side, and so alongst about that rough Iland, untill you come into the Nesse, which lieth behind a chindle strand, there you shall lie under a chindle of rockes like reed sand: there lie also some little rockes thwart of that chindle. This is a good handsom haven, and light for to come into, there it is four and twenty and five and twenty fathome deepe.

The Nesse.

A league to the eastwards of the Nesse, or east point of the Longfound, lieth Stavange, that are some out-rockes, where men may faile within on both sides, to the eastwards of it lieth the Sound of Laerwyck.

Stavange.

The Laerwyck is a great broad Sound, where are many Bights and Laden places, where men may lie and lade Firre-timber. From the east point lieth of a great rane af rockes a good waies of southeast and by east into sea, and runne in almost halfe the found, called the Laerwykes Swines, whereof men must take heed. Within in this Sound it is flat water and showld, so that farre within no great ships can lie afloat.

Laerwyke.

From the Laerwyck unto the Iland Farder the course is eastnortheast four leagues, betwixt them both lieth the little towne Tonsberghen in a great Bight. And from Farder to the Iland Bast the course is north and by west five leagues, betwixt both lieth a fowle point. To the southwardes of Bast lieth Markenboet, and the Bight of Asko, but to the northwards of Bast lieth Longfound.

Farder.

Bast.

From the Iland Farder to the Soen-water, the course is north, but from Bast north and by east. The Soenwater lieth in most north. Vpon it lie many havens and lade places, most on the starboard side as you come in first there is Mos found, a haven that goeth up to the eastwards, and then there is Wykestee, which is a bight behind an Iland, afterwards Ship-hill, a sandbay and a verie good road, that goeth so up alongst to the northwards unto anslo; and then it turneth about to the southwards into the Bottom.

Wykestee.

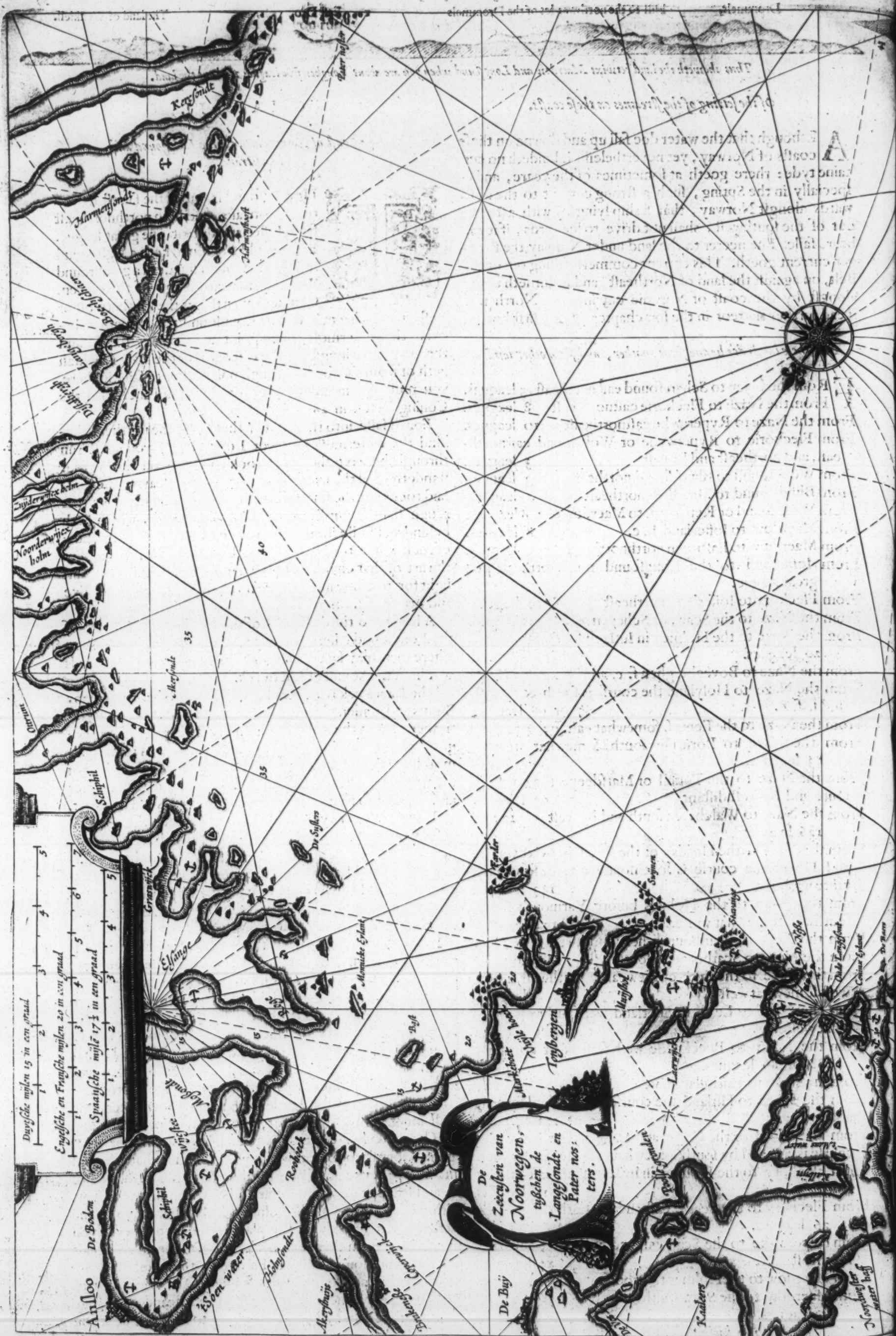
Ship-hill.

When you faile from Farder or Bast unto Soenwater, you shall meet with a reed point, betwixt the Soenwater and the Copperwyke. He that is bound into Soenwater must runne a longst to the eastwards of it, but hee that is bound into Copperwyke must goe up alongst to the westwards of it, and leave it on the starboard side. When that you come within the Lams, you shall espie a little church upon the westland, there is the lading place of the Copperwyke you may faile up from thence to Brakenes. On the north or east side lies Holmsound. From Farder to the point of Roge the course is northnortheast 5 leagues. At the east end of Roge you may ancker, there is a plain strand, you may runne through betwixt the Roge & the Calf, but if you will

Brakenes.

Holmsound.

Roge.



will ancker under Fletto, then you must runne through within the two small rocks.

Sisters. From Bast unto the Sisters the course is f. e. 5 leag. Behind the Sisters to the southwards of the point of Roge, lieth the haven of Elffang, distant from the Iland Farder northeast and by east 5 leagues. When you come off from Farder, you must runne through within the rocks which lie within the Sisters untill you come against the land, there you shall find a great gray rock, which you must leave on the larboard side, and the small rocks that lie there within on the starboard side, & then alongst about by the west land, & then the haven opens it self, which is narrow, & within flat & soft ground.

Ackerfount. From the Sisters to the Iland of Ackerfount the course is east & by south four leagues; betwixt them lieth the Grafwyke within the Sisters, lying from Farder eastnortheast about seven leagues. When you will saile in there, you must leave the sharp point on the larboard side, within lieth a round rock which you may sail about on both sides, thwart of it is good ancker ground. North from this rock lieth a great Bay fit for ships to lie in, that tarrie for a wind, within lieth also a round rock. Men doe runne in alongst by the Westland, which lieth in first north, and about the Iland northnortheast, they leave the Iland on starboard side, and run in n. n. w. by the Westland. To the eastwards of Grafwyke, also betwixt the Sisters and Ackerfount lieth Shiphill that is a haven where men lade Spars & fat wares.

The Iland Ackerfount men may sail round about it, to the northwards of it lieth a great Bay or Sound, lying in farre within the land, called Ottrom.

Southerwixholme. To the southwards of Ottrom lieth Northerwixholm & Southerwixholm, two great Ilands, in a great Sound which lieth farre and deepe within the land, upon it (far within the land) lie many little townes, as Oldburgh, Oldwat, Alleroes and Dragens, from thence commeth much fat ware. Southerwixholme & the Iland Ackerfount, lie northwest and by west, and southeast and by east five leagues asunder.

Harmanshead. From Southerwixholme to Harmanshead the course is southsoutheast five leagues, betwixt them lieth Boechschaer, but two leagues to the southwards of Harmanfount

lieth Kerkfount, which is a great river which lieth in farre within the land.

Harmanshead & the west end of the rocks (which men doe call the Pater-nosters) lie north and by west, and south and by east five leagues asunder: to the southwards of them men doe saile into Maelstrand. Vpon the coast betwixt Farder and Maelstrand, is almost everie where good ancker-ground in five and thirtie and fourtie fathome.

Of the setting and the course of the streams in these places, read in the former chapter.

How these lands do ly one from the other, and from other lands.

From Longfount to the Iland Farder e. n. e. 8 leagues.
From Laerwyke to Farder e. n. e. 4 leagues.
From Farder to Monk Iland, or Roge, n. n. e. 5 leagues.
From Farder to the Iland Bast n. and by w. about 5 leagues.
From Farder to Soenwater north or somewhat more easterly 8 leagues.
From Bast to the Copperwy n. and by w. 4 leagues.
From Bast to the Reed point, or Soenwater, n. n. e. 4 leagues.
From Bast to the Sisters southeast 5 leagues.
From the Sisters to Ackerfount east & by south 4 leagues.
From Ackerfount to Southerwixsholme southeast and by east 5 leagues.
From Southerwixsholme to Harmanshead southsoutheast 4 or 5 leagues.
From Harmanshead to the west end of the Pater-nosters 5 leagues.
From Longfount to the Holme south & by west 35 or 36 leagues.
From Longfount to the Scaw southeast and by south, or a little more southerly 21 leagues.
From Farder to the Holmes f. f. w. 40 leagues.
From Farder to the Scaw south an by east 22 leagues.
From Ottrom to the Scaw south and by west 24 or 25 leag.
From Harmanshead to the Scaw southwest and by south 16 leagues.
From the Pater-nosters to the Scaw westsouthwest 12 leag.

How these lands doe shew themselves at sea.

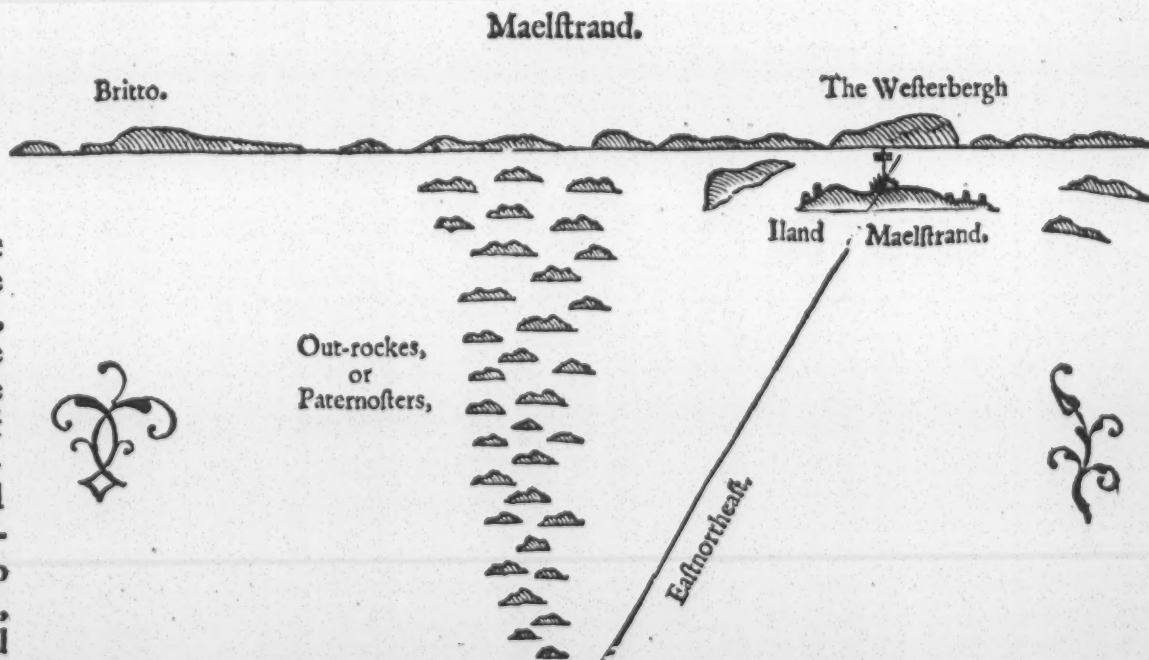
Thus sheweth the land to the eastwardes of Longfount when you are about five leagues off from the land, and saile from the westward alongst by it.



Thus sheweth the land of Northeast betwixt Southerwixsholme and Maelstrand when you saile alongst by it, being foure leagues without the land.

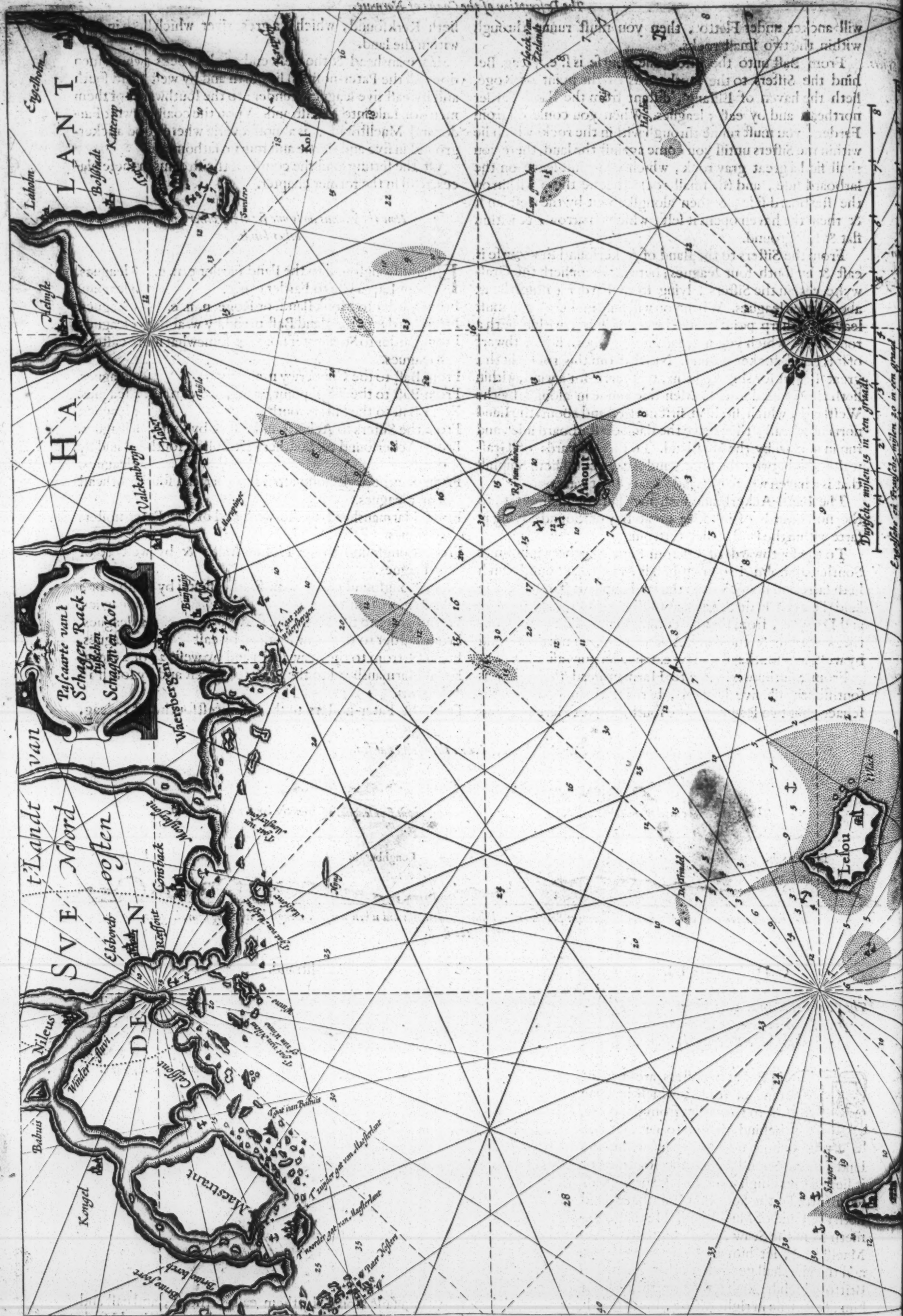
CHAP. III.

The Coasts of Norway and Sweden, betwixt Maelstrand and the Cole, and how men shall saile through the Reach of the Scawe.



THE Pater-nosters are a great rane of rocks, which lie farre off to seawardes from the coast, behind them, to wit, on the south side, goeth in, within the land a broad Sound, upon the southside of it lieth a great high round rocke or hill called Britto. To the Southwards of that Sound lieth the Iland of Maelstrand. He that commeth from the Scaw, and desireth to saile to Maelstrand, let him goe on eastnortheast, and then he shall get sight of the foresaid hill Britto, which he shall set eastnortheast from him, & so saile in right with it, untill that hee commeth by the Pater-nosters, which hee must leave on the larboard

side, and saile alongst by them eastnortheast, and east and by north, and then he shall runne in sight of the Iland Maelstrand,



strand, upon which standeth a great stony beacon, or Warlock, where sometimes standeth a mast with a barrell upon it, and sometimes also there standeth none. You may runne in on both sides of the Iland, either about to the northwardes, or to the southwards of it, according as shall be best fitting for the wind: If the wind be at west, or southwest, then you may best runne in at the norther channell, or if the wind be at south or southeast, then it is best to runne in at the souther channell. The norther channell lieth in by the south side most east and by south, and eastsoutheast, but the souther channell east & east and by north. When you come within the Iland, you may sail about by it, untill you come before the towne, which you shall see then lying before you. Men doe ancker there with an ancker to seawards out a head, and make fast a cable out a stearne on the kay, lying so with the stearne to the shoare.

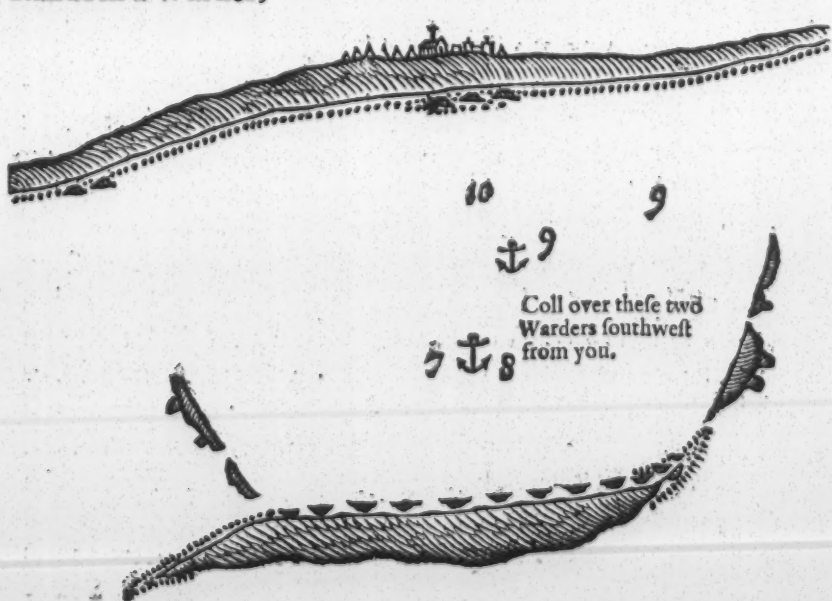
About the middest, going in at the souther channell lieth a rock above water, which you may saile about on both sides, but within that rock lieth a suncken rock under water, and to the southwards of it also a great rock, but a little further out then the other. There lieth also a suncken rock under water by the Iland on the north side of the foresaid rock which lieth above water, which men must be verie carefull to take heed of. There is every where good ancker-ground. From thence you may saile through within the rocks to Calf-sound, Bahoufe and Nilus.

Calf-sound lieth distant from Maelfstrand about foure leagues. For to saile in there out of the sea, you must runne alongst to the southwards of a great rock, whereupon standeth a Warder. On the south side of the havensmouth there are great rocks, but on the north side all small rocks. When you come within the rocks about the point of the north land, there you may ancker in 15 or 16 fathome, there is good ancker ground. From Calf-sound you may runne up to Bahoufe, & then you leave Congell lying on the larboard side. You may also saile up to the southwards, through within the rockes unto the river of Nilus.

Foure leagues southsoutheast from Calfe-sound, lieth the Iland Winneu, to the southwards of it goeth in the channell of Nilus or Gottenburch, which is a large & broad sound lying in northnortheast in eight, nine, and tenne fathome, you must leave Winneu on the larboard side, and runne in betwixt the point of the maine land, called Kelderhead, and the Iland little Denmarke, and then in alongst by the maine land on the south side, untill past Elsburch to Gottenburgh, it is there all cleane and cleare without any danger that might hurt you.

You may also saile in to the northwards of Winneu, then you must leave Winneu, and also some long rocks on the starboard side, and the rough Iland, or little Denmarck, on the larboard side, and then in alongst by the point of the main land, on the south side, as is before said.

Two leagues s. s. e. from Winno lie Maelfound & Consback: Maelfound is a rough Iland, which you may saile round about in seven or eight fathome, under it is also good road. Two cables lengths westnorthwest from Maelfound, lyeth a suncken rock under water, and also one even with the water, a bow shot from the land whereupon standeth a Warder,



Eastnortheast from Maelfound lieth the haven of Cons-Consback, there stand two great warders, each upon a rock close to the land, betwixt them in lieth the haven, it is a faire haven, ten fathome deepe, and good ancker-ground, when you come about the low point you shall see Consback lie to the northwards of you. For to saile into Consback, you most runne very neare to the north point, and then straight, right to the north in. Vpon the eastside lieth some great rocks, high enough above water, them men must leave all on the starboard side, close by the west wal it is best, faire and cleane, how nearer the wal, how better, men may every where by the west wall ancker at 10, 12 and 14 fathome.

Southwest and southwest & by west a league and a halfe, or two leagues to seawards from Maelfound lieth the foule and dangerous rock Nyng, or Nyding, even above water, Nyding. so that the sea doth almost break over it, whereof you must take verie good heed. You may sail through betwixt Nyding and Maelfound or the maine land, but it is there all showld water.

From Nyding to Watersbergen the course is s. e. 5 leag. Monster betwixt them, three leagues to the southwards of Maelfound, lieth Monsterfound, that is a river or Sound, which runneth up into the land, upon it lie some towns as Vlymenes, Horn, & Gosewaer. From Monsterfound three leagues to the southwardes, lieth Watersbergen. For to sail in there, you must runne in by the east land. At the point of the Iland which lieth on the n. w. side before the haven, lieth also a suncken rock under water, and from the point where the castle standeth upon, lieth also a suncken rock, both which you must avoid, and therefore runne in amidst the channell, betwixt the foresaid Iland and the maine land, where the castle standeth upon the point, and anker when you come within the point right against the castle in four or five fathome. For to sail into Watersbergen by markes, you must bring Oldboey to the north side of the castle, and go in n. n. e. there lieth a rock even with the water, which you must leave on the starboard side, and anker right against the castle in 4 or 5 fathome, as before is said.

Two leagues to the southwards of Watersbergen lieth the river of Valckenburgh. On the north side of the Rivers mouth lieth an Iland called Muruptinghe, and three leagues to the southwards of it lieth an Iland called Tullo, betwixt that Iland & Valckenburgh within the land, lieth a high hill, called Haver, being white to see to, as if it were sandie land: Seafaring men do name it yong Coll, because of the likenesse of height and fashion, which it hath like Coll, and sometimes it is mistaken for Coll.

Three leagues eastwards from Tullo lieth Helmstee upon a little river, but there can goe in no ships, but onely Huyes and boates.

Two leagues southwardes from Helmstee lieth the little towne, or little castle called Laholm, there goeth also a little river into the land. A league westwards from Laholm lieth Bostadt, these places lie in a great bay.

Swedereur.

Three leagues to the westwardes of Bostadt lieth the Iland Swedereur, you may runne in behind it a both sides, for to ancker from the northwardes, it is there large and broad for to goe in: but from the north end of Swedereur shooteth of a little ledge of rocks, you must runne alongst to the northwards of the rocks, that lie at the north end of Swedero, leaving them on the starboard side, and anker behind the Iland, betwixt the great and little rockes in seven fathome, thwart of the little white church of Turcko, so that the great rocke with the two warders at the south end be southwest from you, and Col stand over the foresaid Rock, there it is best lying, and there you are landlockt for all windes. If you wil run out again to the southwards of it, then leave the two rockes with the warders on the starboard side, and ruune boldly close about by them, towards Coll.

He that commeth of from Anout, & by reason of fouterlie

southerlie windes cannot runne a weather Col, let him goe from Coll northeast and by north towards Swedereur, and runne close about by the two foresaid rockes with the Warders, at the south end of Swedereur, untill he come behind the Iland, and ancker, as is before said, there it is soft ground. A north wind bloweth there open in.

From Swedereur to Coll the course is south west and by south, betwixt both lieth a great bay, upon which lieth that little towne Engelholme, where men also may ride.

For to saile from the Scaw to Coll.

From the Riffe of the Scawe to the Iland Lefou the course is f. f. e. but the point of the Riffe & the Trindell lie due f. e. and n. w. 8 leagues asunder.

Lefou.

The Iland Lefou is compassed round about with fowl Dwaelgrounds Riffes and sands, that lie off. From the f. e. end where the church stands upon, lieth off such a great riffe or showld from the shoare, that about 3 leagues from the land to the southwards of it, it is not deeper then two fathome, there under it you may make road for a f. f. e. wind. Likewise from the southwest point, lieth off such a great showld, that when the foresaid flatte church is east, & e. n. e. from you, you cannot come neare the land within three leagues. But the north end you may come so neare, that you may have road under it for a southerlie & f. e. wind, in 3, 4, 5, 6, & 7 fathome, the church being about south from you.

Riffe of Lefou.

From the northeast end lieth of also a riffe right towards the Trindell, which you may found about, when you saile through betwixt Lefou and The Trindell: which is the nearer Lefou, the showlder, and the nearer the Trindell the deeper. Close by the Trindell on the inner side or west side, it is deepe five and six fathome.

Trindell.

The Trindell is a stonie sand plate, three cornered, and somewhat long of fashion, it is no more then 4. foot deep, & about two akers of land great, and lieth most alongst the farewaie, lying from the northeast end of Lefou northeast, or a little more easterlie about 3 leagues distant. On the n. e. side of the Trindell lieth alwaies a great buye, whereby you may know it a farre of.

Depths about the Scawe.

When the point of the Scaw is northwest and by west about a league from you, there it is 17 & 18 fathome deepe, but when the point lieth w. & w. & by f. from you, about a league, there it is four or five & thirtie fathome deepe.

But he that commeth sailing about the Scawe, and runneth without the riffe, in 10, 11, or 12 fathome, and goeth on from thence southeast, or southsoutheast, keepeth a long while still, the depth of fiftene and sixtene fathome, at least the space of three leagues, before he get twentie, or five and twentie fathome. When as that you beginne to get againe showlder water of tenne, eight, seven and six fathome, that goeth then through within the Trindell. When that you shall mette with the foresaid depth of the showlding, and saile yet further on southsoutheast, then you must be verie carefull to use your lead often, because of the foresaid showld, which lieth of from the northeast end of Lefou, towards the Trindell, you may runne over it, (as is said) in five, four, and also well (in the narrowe) in three fathome. When the northeast point of Lefou beginneth to come southsouthwest from you, then you come on against the riffe or showld, but when the point is southwest from you, then you are over the showld of the riffe. When the west end of Lefou is f. w. and the church southwest & by south from you, then you are about thwart of the buye of the Trindell.

The Helmes.

Four leagues south & by west from the Scaw lie the small Helmes, not farre from the shoare, that are three little Ilands, the southermost, the Iuttes doe call the Deyen, or the Dee, the middlemost Holmes, & the northermost Grasholm, by them lieth yet another little Iland. You may saile through between the southermost and the middlemost, but then you must runne nearest the southermost, through betwixt them is 4 fathome water.

Vnder the Helmes is good road for southeast, southsoutheast and southerlie windes,

He that will goe to ancker under them, comming from the Scawe, must runne to the strand in three fathome, and runne so alongst by it, in betweene the strand and the Helmes, untill that he be within the rockes, there he may ancker, or also well runne through alongst by the footstrand in 3 fathome. When the rockes of the Helmes are east, and east and by north from you, there is the road in foure fathome, and four fathome and an halfe. The best road for to lie under the Helmes with small shippes, is betwixt the southermost & middlemost little Iland, somewhat nearer the mainland then the Ilands: but for great shippes it is best to lie by the Grasholme.

He that wil not lie so far within the Helmes, may also ancker farther out under the high land of Lacklou, so that the Helmes be southeast from him, in 4, 5, 6, or 7 fathome, there it is also verie good lying for f. and f. f. e. windes, in clean ground, of small white and black sand.

Betwixt the Scawe and the Helmes in the farewaie it is deepe 18, 16, & 15 fathome. Betwixt the Helmes and the mayneland, there is at the showld 3 fathome water. When you come from the northwardes through betwixt them, untill you come thwart of the south end of the rockes, there runneth of a little riffe from the Helmes towards the strand, where the great stones lie called Boutser riffe, but keeping in three fathome, you cannot take hurt of that riffe: You may well run out againe by that south end towards Zeabuy. So that you may sail round about the Helms, with ships that are not of verie great draughts.

Betwixt the Helmes and Lefou a good waies from the Helmes it is 20 and 25 fathome deepe, soft ground, but one league east from the Helmes lie some rockes or showldes, whereof you must take heed.

To the Westwardes of Lefou lie the Dwaelgrounds, to the northwards of the foresaid riffe, that lieth of from the southwest point of Lefou, wheare the flat church standeth upon, which are verie uneven of 3, 4, 5 & 6 fathome deep. Of these and more other showldes and uneven groundes betwixt Lefou and Zeebuy read the description of the norther part of the Belt.

About a league n. n. w. from the west end of Lefou, f. f. e. somewhat southerlie from the point of the Scaw, and e. f. e. from the little Helmes, there lie two or three little low Ilands or rocks, a little above water; betwixt these Holmkens, and the Helmes it is 20 fathome, but betwixt these Holmkens, and Lefou 5 fathome deepe, to the northwardes of them it is far flat, foure and five fathome deepe sand ground.

If you will sail by night of from the Helmes or from the high land of Lacklie towards Lefou with a f. w. or f. f. w. wind, then saile no nearer because of these little Ilands and showlds then f. e. and by e. with that course you shal runne over those showlds or flatts (lying to the northwards from these foresaid Holmkens) in six or seven fathome, afterwards it wil be deeper again, 9, 10, & 12 fathome, go then on e. f. e. so long untill that the east end of Lefou be f. w. from you. When that east end beginneth to come south and by west from you, then you come on against that flat, or riff, which shooteth off from the northeast end of Lefou towards the Trindell. It doth showld up from 14, 12, and 10 fathome, unto 8, 6. and, 4, and also to 3 fathome. If you be somewhat neare to Lefou, the 3 fathome lasteth a good while, and then it wil be againe deeper, 4, 6, 10 and 15 fathome, and then verie deepe. When that foresaid northeast end of Lefou is f. w. from you, then you are cleere of that flat. The Helmes and the Trindell lie east & by south and west and by north seven leagues asunder.

When you come from the Scaw with a f. w. or w. f. w. wind, and that you will saile through within the Trindell, (that is betwixt the Trindell and Lefou) it is best that you goe such a course, that you may make ybur waie good f. e. and by south, and then you shall runne alongst about the middest of the channell, through betwixt the Trindell and the foresaid low rocks, (which lie n. n. w. of from the north point of Lefou, & f. f. e. from the point of the Riffe of the Scaw.) At the deepest in this fare waie, betwixt the Scawe

Scawe and Lefou it is 23 and 24 fathome, being past over that, you shall be come against a banck of 8, 7, and 6, and also into 5 fathome, and then you shall be about due west, or a little more northerly or southerly from the buye upon the Trindel, Afterwards it will be again deeper, if you be in the right farewaie, to wit, 7, 8, 10 and also well twelve fathome.

For not to faile within the riff, or the northeast point of Lefou, it is good to run then somewhat more easterlie, to wit, southeast, or southeast and by east, untill you come against the foresaid riff that lieth of from the northeast point of Lefou, which you may found, and so runne about by it in five, four and also three fathome. When the northeast point of Lefou, (that is the point with hommocks) is south & by west from you, then you come against the riff, & when that point is f. f. w. from you, then you are right thwart of the riff, but when the point is southwest from you, then you shall be past & cleare of the riff. Being gotten about it towards Anout, it will be deepe thirtie, five and thirtie and also fourtie fathome.

He that commeth by night about the Trindel, must not spare his lead, on the outer side, that is on the east side of the Trindle you may not come no nearer by night, then nine or 10 fathome, & then you shall not be farre of from it.

When you faile close alongst without the Trindel in cleare weather, and that you stand without board, upon the bendes of the shippe with your feet by the water, then you can even see Lefou. If that then in cleare weather standing so without the ship, you cannot see Lefou, when you are about thwart of the Trindle then you run farre enough alongst without the Trindle.

The Trindle and the riff of Anout lie northwest and southeast, or as some say f. f. e. and n. n. w. 9 or 10 leagues asunder. Betwixt Anout and Lefou in the right farewaie it is five & twentie fathome deepe, but to the westwards of it, to wit, right betwixt the Ilands Anout & Lefou it is all shewld water, of 7 & 8 fathome, you may faile there over these flats and showlds through betwixt Anout and Lefou, into the Belt.

Anout is upon the west side verie foule, and farre of to seawards from it, lie manie uneven dwaelgrounds of 2, 3, & 4 fathome.

When you faile with a southwest or westerly wind from Lefou to Anout, and runne over the flat of Lefou in 3 or 4 fathome, you need not faile on more easterly then f. e. and by east, although it be by night, you shall with such wind & course run cleare enough of Anout. When as that you reckon to have the length of the riff, goe then on f. f. e. and f. and by e. for to faile a weather of Coll. But by day or when you can see about you, not more leewardly then f. f. e. When you faile of from the foresaid point of Lefou to Anout with a f. w. or w. f. w. wind, as is before said, and make reckoning to come by night by Anout, then you can not doe better, as to goe eight, tenne or twelve glasses, (according as the wind shal blow fresh) on f. f. e. untill you come against the shewlding of Anout, and looke for the day, that running not to far to leewards of the point of the riff, you may the better get a weather of Col. Likewise, when you come of from Col with a southwest or southerly wind, and runne about a halfe league alongst without Coll, you need not also faile more northerly, then northwest and by north, that goeth also a good waies alongst to leewards of Anout riff, and so forth towards Lefou. But when you come with a northeast wind out of the Sound, or from Col, you must runne out close by Coll, if you wil fail a weather of the riff of Anout.

He that must lie by or turne to windwardes betwixt Lefou and Anout, and is bound for the Sound, let him keepe himselfe on the west side of the fairewaie, when he is a league or two a weather of Lefou, upon those foresaid flattes, of four, five, sixe and seven fathome, when as that he beginneth to come within a league or two of Anout, there it will be again deeper, but uneven, the one cast at least a fathome more or lesse then the other, when that you shall begin to get that uneven ground of fiftene, twentie, and also thirtie

East. waters 2 booke.

fathome, then is Anout yet about three leagues south from you comming neare Anout it will be verie uneven, at one time 30, & then soone againe 15, 17, & also 20 fathome.

If you will faile towards Lefou with a southwest wind, comming about the riff of Anout from the southwardes, then goe not on more westerly then northwest. If you goe on more westerly, either westnorthwest, or northwest and by west, then you shall come soone upon the Flatte, betwixt Anout and Lefou, and shall find first tenne, and then by little and little six, five and four fathome. When that with the northwest waie you beginne to get Lefou in sight, then it lieth high, that is, the west end about w. n. w. and the northeast end, where the riff lieth off, about north-northwest from you. When you come so neere to Lefou, that you can see the east end out of the toppe in cleare weather, about northwest from you, there it is thirtie, two & thirtie, and four and thirtie fathome deepe, that lasteth so long untill that the foresaid east point be southwest from you, but when that point is f. f. w. from you, then you are right thwart or upon the point or showld of the riff, then you shall runne over there in three, four, or five fathome: when that foresaid point commeth to be south and by west from you, then you are past and cleare of the riff.

Betwixt Anout and Waersberghen in the farewaie it is deepe one and twentie, two and twentie, and three and twentie fathome, betwixt them lieth also a banck of tenne, twelve, fourteene and sixteene fathome. When the northernmost high hill of Waersbergen is northeast from you, then the point of Ancutes riff is southwest from you: but when that hill is northeast & by e. from you, & that you be somewhat nearer Norwaie then the riff, then you are upon that banck. When you come upon it by night, then goe on south, or south and by east, according as the wind shall bee, & then you shall get againe deeper water. There lieth yet another banck betwixt the riff of Anout & Valckenburgh, which lieth alongst unto Halandt, which at some places is not deeper then eight fathome. When the point of the riff is about south and by east, and the high land of Anout is about south and by west from you 4 leagues, there lieth also a banck of fourteen or fifteen fathome.

The riff of Anout lieth off from the northeast point of Anout about eastnortheast a league and a half into sea, & at the end lieth drie above water, which is exceeding steep and needle too. The north side (when you come from the northwardes or the westwardes) you may found, & runne alongst by it, in 17 or 18 fathome: but comming from the southwardes, you cannot (in no wise) come neare it by your lead, for on the southside close to the Riffe, it is thirtie, and 35 fathome deepe.

On the northside of the riff, you may anker at many places, in tenne, eleven, twelve and thirteene fathome. When you anker in eleven, twelve or thirteene fathome, so that the Firebeacon be southeast and by south, and the high land of Anout, which is the west end, about southwest and by west from you, then lieth the outermost end of the riff east & by north from you, there is verie good lying for eastsoutheast, southeast, south, and southsouthwest windes. When you set faile from thence, & are bound to the Sound, then you may boldly without feare (either by night or darke weather) faile alongst by the riff in sixteen, seventeen or eighteen fathome, untill thwart of the end, keeping in such depth you can take no hurt of it. Comming by the end, it is 24 and five and twentie fathome deepe, but when you come about the point, and beginne to goe on south-southeast, then you have presently close to the riff no ground in thirtie and five and thirtie fathome. The Riffe of Anout and Col lie one from the other southeast and northwest about tenne leagues asunder. In cleare weather you may easily see from belowe both coll and Anout, when you are betwixt them both. For to faile from the riff to the Sound with a westsouthwest wind, you need not faile on nearer with a ship that saileth wel, then south-southeast, with that course you shall sail farre enough a weather of Coll. Comming neare the coast of Zealand, that you may found in fourteene, twelve, tenne and eight

F

fathome

Depths by Lefou.

Depths thwart of Anout.

Riffe of Anout.

Road under Anouts riff.

Depths betwixt Anout riff and the Sound.

fathome deepe. Betwixt Anout and Zealand, in the farewaie it is eightene and twentie fathome deepe. Betwixt Anout and Zealand fifteen and sixteen fathome, but in the farewaie betwixt Anout and Coll, it is deepe, 20, 21, 22, & 23 fathome. To the southwards or the westwards of it, it is showlder, to wit, 19, 18, and also wel 14, 13, and 12 fathome, according as you come to the westwards, but towards Norwaie it is deeper, to wit, 24, 25, 28, and also 30 fathome, whereby you may perceive whether you be nearest the Norwaie side to the eastwardes of the farewaie or to the westwards.

*Divers
bancks.*

About northwest from Col four leagues, and southeast and by east from Anout, there lieth a banck of nine, tenne, and twelve fathome.

About east and by south from Anout, so far that you cannot well see it from beneath, but may see it out of the top, and northwest from Coll, there lieth also a banck of sixteen fathome, grosse sand ground as if it were ground of the riffe.

Lowfegrounds.

South and by east about eight leagues from the point of Anouts riffe, southeast and by south from the south end of Anout, and west and by north from Coll about five leagues, lie the Lowfegroundes, upon which is no more then eight foot water. He that commeth off from Anout riffe, being bound for the Sound, and goeth not more southerly then southsoutheast, shall not faile within these grounds, but with a south & by east course he should fall within them. He that commeth out of the found being bound towards Anout, should (with a westnorthwest course off from the Sound) also faile within the same, therefore he that is bound with a bare wind from Anout to the Sound, or from the Sound to Anout, must be carefull thereof.

Hafelin.

The Iland Hafelin lieth from Anouts riffe south tenne leagues distant, and from Coll southwest and by west eight leagues, which is on the north side or outer side verie foule, full of riffes and showlds, but on the south side or inner side towards Zeeland it is indifferent cleane, so that you may well have road there. From the east end of Hafelin lieth off a Riffe northnortheast and northeast and by north

towards Norwaie three leagues into sea, untill within a league neare to the Lowfegrounds: he that must turne to wind wardes here, with southerlie or northerlie windes, & runneth somewhat far over westwardes into the bay, must be verie carefull, and take heed thereof, because it is thereabouts verie uneven of depths, & uneven grounds, & therefore you cannot well come neare them by your lead; but the Coast of Zealand you may come neare in six or seven fathome by your lead.

If it should happen that you must lie by, in the Scawe reach in long darke nights or mistie weather, then observe these directions following: If you be betwixt the Scawe and Lefou, then you may keepe your selfe well bouldly to the southwards or westwardes, but use the lead much: about the Helmes and the Scawe you may come neare the shoare into ten, twelve or fiftene fathome, before you need to cast about. If you be by your reckoning thwart of Lefou, you may come neare it in ten or fifteen fathome: But if you be betwixt Lefou and Anout, there you may runne upon the flatts in five, six, seven, eight or tenne fathome. If you be betwixt Anout Hafelin and Coll, there you may runne to the south shoare in fiftene and sixtene fathome, but betwixt Hafelin and Zealand in ten or twelve fathome.

It is best in anie wise to keepe you rather to the south shoare, then to the Norwaie side, but you must be verie carefull of your lead, and use it verie much.

The setting and course of the streames in these farewaies.

IN the Scawe reach, betwixt Maelstrand & Waersberghen the streame goeth most still with the wind, and it rippleth there sometimes in some places, as if there were showlds, this you may find in calme weather, if you let a lead snke to the ground.

By the Scawe the streame commeth most commonly falling out at the Belt towards the land of n.e. especially when the wind hath blowne a while out of the east or northeast, and runneth alongst by Norwaie to the northwardes.

How these lands doe shew themselves at sea.



Thus sheweth the land betwixt Maelstrand and Waersberghen.



Thus sheweth the Land of Waersberghen, when you saile alongst by it, from Anout into the Sound.



Thus sheweth Lefou when you saile from the Scawe towards it.



Thus sheweth Anout when you saile off from Lefou.

Men comming off from Anout, that will faile by night with a westerlie wind, towards the Scawe: or comming from the westwardes about the Scawe, with a southerlie wind, being bound for the Sound, might soone be carried with this current under Norwaie, a good while before they should thinke or feare of it. Of this current read further in the 6 chapter of the first booke.

In this fairewaie betwixt the Scawe and the Sound, and then from the Sound untill about Fasterborne, it is exceeding necessarie, that a Pilot (or he to whom the charge is committed) be verie carefull in looking out, and be verie vigilant, that he may avoid the multitude of dangers, of showldes and riffes lying there: the skilfullest and best experienced of all hath there enough to doe.

How these places are distant one from the other.

From the west end of the Paternosters to the Maelstrand the course is eastnortheast 2 leagues.
From Maelstrand to Winneu southeast 5 leagues.

From Winneu to Maelfound southsoutheast about 2 leag.
From Maelfound to Waersbergen southsoutheast 5 leag.
From Waersbergen to Tuylo southeast 5 leagues.
From Tuylo to Laholme southeast and by east 5 leagues.
From Laholme to the point of Turko behind Swedereur the course is westsouthwest 3 leagues.
From Turko to Engelholme southeast 4 leagues.
From Engelholme to Coll west 4 great leagues.
From Maelstrand to Nyding s. f. e. 8 or 9 leagues.
From Maelfound to Nyding the course is southwest and southwest and by west a league and an half.
From Nyding to Waersberghen southeast about 5 leagues.
From Waersberghen to Coll south and by east 12 leagues.
From the south end of Swedero to Coll southw. 4 leagues.
From the Riffe of the Scaw to Maelstrand e. n. e. 13 leagues.
From the Riffe of the Scaw to Nyding southeast and by south 16 leagues.
From the Riffe of the Scawe to Waersberghen eastsouth-east 23 leagues.
From the Riffe of the Scawe to Coll alongst without the Trindle

Trindle south 30 leagues.
 From the Riffe of the Scawe to Lefou f. f. e. 8 leagues.
 From the Riffe of the Scawe to the Trindel, due fouteaft 8 leagues.
 From the Trindel to Anouts riffe fouteaft, or as some will say somewhat more fouterly 9 or 10 leagues.
 From Anoutes riffe to Coll it is right fouteaft 10 leagues.
 From Anoutes riffe to Hafelin fouth 10 leagues.
 From Coll to Hafelin fouthwest and by west 8 leagues.
 From Coll to the northermost out point of Zeeland fouthwest 5 leagues.

CHAP. IV.

How men shall faile from Col into the Sound, and then through the Showldes, untill they come about Falsterborn.



From Coll to the Iland Hafelin it is fouthwest and by west eight leagues, you may faile through betwixt Hafelin and Zealand, untill you come into the Belt: the Coast of Zealand is a faire strand, but somewhat to the westwardes of Hafelin there shooteth off a riffe to seawards, which you must avoid.

About eastfouteaft from Hafelin goeth into the land a great broad Sound, which without at the entrance of it, is a great league broad, there is good anckering for a north-east wind in five or fixe fathome. This Sound devideth it selfe within the land into three parts, the first or the eastermost called Roskildifour, goeth up fouthfouteaft unto Roskild, the second called Isenvoert lieth into the land fouth, and fouth and by west at least five or fix leagues, unto Iflickby & Holbeck: within it is at least two leagues broad, and in the middest lieth a great Iland. The third lieth to Dracksholme also at least five leagues fouthwest and northeast, like the coast towards the Belt. The Coast of Zealand betwixt Hafelin and the Sound is a cleane coast, you may faile alongft by the land in six or seven fathome, but come no nearer to it by night then 12 or 13 fathome, for at some places it is steepe, & sholdeth up sodenly. Where that little new church standeth, thwart of it, it is flat three and four fathome, & to the westwards of that wood which standeth to the westwards of Lapsand, you may come in four fathome by the shoare, without taking hurt, but comming neare Lapsand, you must keepe further off from the shoare, in seven or eight fathome, or els you should get behind the point of Lappesand.

Lappesand lieth about an English mile to the northwards of Elsenoore, or the Castle of the sound, lying on the west side of the fairewaie, alongft the coast of Sealand. For to avoyd Lappesand you must be carefull of these marks, there standeth a house to the westwards of the Kings mill, to the westwardes of the Castle of Cronenburgh, keepe the Chimney of that house to the westwards of the front of the Kings mil, and then you can take no hurt of Lappesand then runne alongft by it in six, seven, or eight fathome, so long untill that the east end of the Iland Ween, commeth a little without the castle of the Sound, keepe that so standing, and faile so in fixe or seven fathome, somewhat close alongft by the castle: you may plainly see lying through the water all that can hurt you.

If you will shift roads out of the sound, and ancker behind Lappesand, then faile thwart of the foresaid Kings-house, called the Cau or Kings mill, so that it doe stand about fouth or fouth and by west, or fouth & by east from you, ancker there in six, seven or eight fathome, there it is good lying out of the current and sandground: but if you wil ancker in twelve, thirteen, or fourteene fathome, there it is soft ground, & there goeth a strong current with fouterly or fouteaft windes, but you lie there better, in more roome, for to faile inwardes againe, if it should happen that the wind did sodenly shift out to the northwest. It happened once one of my acquaintance, that he had anckered somewhat to the eastwards of the Kings-mille, in fixe

East. water 2 booke.

or seven fathome, and the wind did shift in the night to the northwest, when they weighed their ancker the shippe fel towards the land, and before they could get the ship about before the wind, they did runne in three fathome over the point of Lappesand.

From Coll to Elsenoore or the Sound the course is fouth-east, and fouteaft and by fouth four or five leagues. About halfe waies betwixt Coll and Elfenburgh lie the Swyneboeden, which are some foule rocks, and suncken rockes, which lie of too seawards, a good waies from the land. But when you faile towards the Sound comming from Col, then keepe the Iland Ween hidden behind the Castle Cronenburgh, and then you cannot fail foul of the foresaid Swineboden, when that you reckon that you are past them then rune in amidst the channell, for to avoide Lappesand, or els if you bring the east end of Ween then again right without the castle, or keepe in seven or eight fathome from the Sealands side, you cannot take hurt of Lappesand. When you are come within the castle, you may ancker where you please. The shippes doe commonly ancker all alongft by the land, untill to the fouthwards of Elsenoore, there it is fiftene and sixteene fathome deepe, but with a fouteaft wind it is bad lying there.

Towards the Iland Ween lieth a banck of eight or nine fathome it is better lying there, but it is somewhat farre from the land.

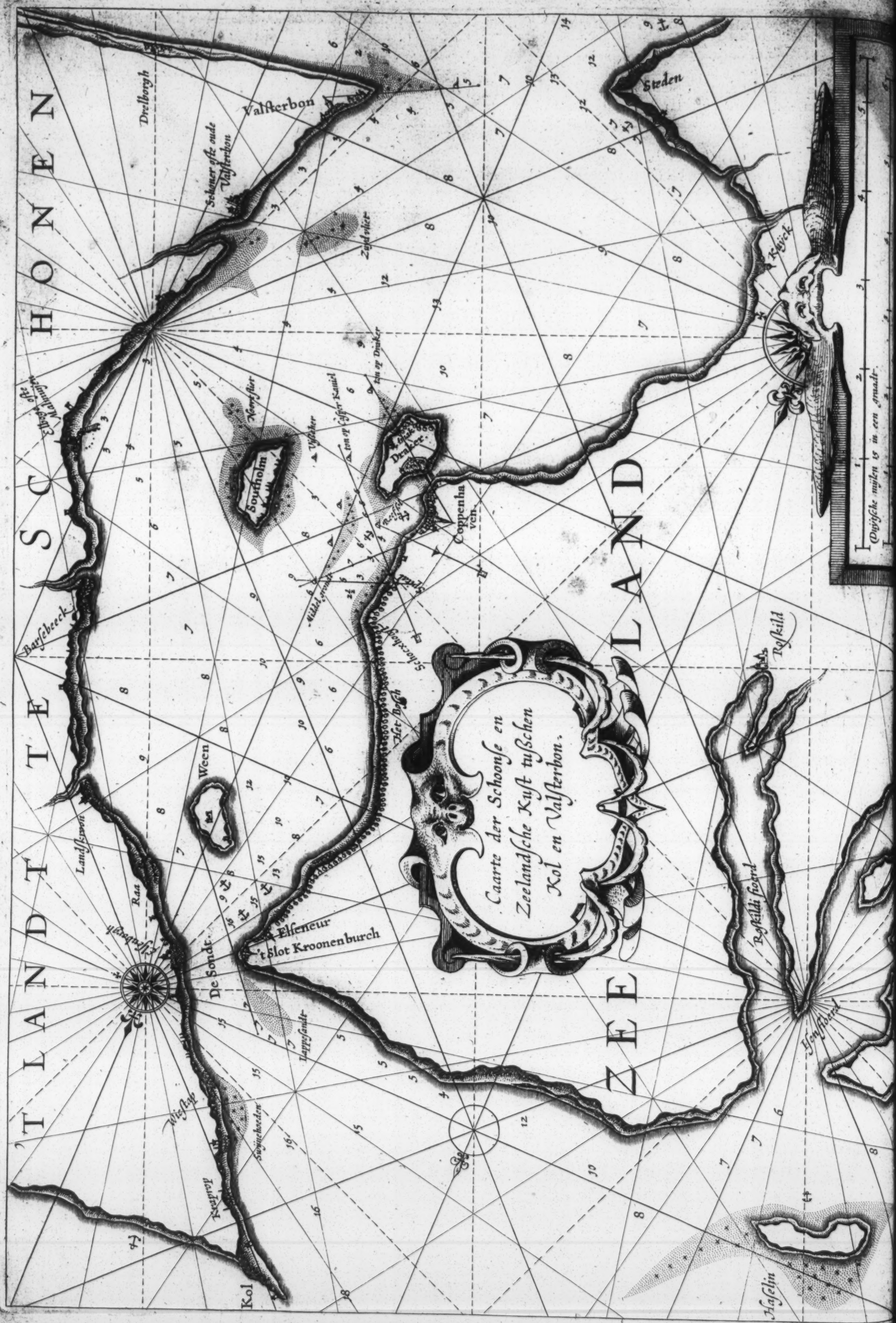
When you wil fail out of the Sound towards Coll, and are come to the end of Lappesand, then goe northwest and by west for to avoide the Swyneboden, untill that Coll be northnortheast from you, then goe boldly northwest and by north, or northnorthwest, according as the wind shall be, for with a northeast wind, you must runne out northnorthwest, verie close of alongft by Col, for to fail a weather of the risses of Anout and Lefou.

For to faile to Elleboghe or Malmuyen, & Landscroone.

If you wil fail out of the sound to Elboghe or Malmuyen, goe from Ween fouteaft & f. e. & by f. and then you shall see the steeple, or the towne lying before you, faile towards it, in that farewaie, it is most 7 or 8 fathome deepe: when you come within the Southholmes, it wil be 5 or 6 fathome deepe, it doth shold up sodenly, from the 7 fathome to 5, but before the towne it is sholder water, you may ancker there in 3, 4, or 5, fathome if you will; you may lie also at the end of the Head, in 3 fathome, there it is good lying, but with a northwest wind it is a bad roade, for it bloweth there open in.

If you will runne out againe to the fouthwards of the Southholmes towards Fasterborne or Steden, you must take heed of the Southholmes, which are foule round about. From the north end shooteth off a riffe a great waies: Vpon the east side, at the fouth end, it lieth verie farre of sholde, there lieth also the Northvliet, that is a ledge of rocks under water, but you may perceive it through the water, you shall leave it on the Southholmes side, to wit, on the starboard side of you: but the Southvliet, which lieth thwart of old Fasterborne, you shall leave on the larboard side; & so runne through betwixt them, it is in that fairewaie at the sholdest four fathome deepe. When you come off from Malmuyen, and that the steeple of Coppenhaven come to the fouth end of the Southholmes, then you are past the Northvliet. When you faile thus there through, you must be verie carefull to avoide these foresaid groundes. You may runne out also alongft by the strand of Schoonen, and leave both the Northvliet and Southvliet lying on the starboard side: you may found that strand in four and five fathome, as also the Riffe of Fasterborne.

He that will fail into Landscrone, must know that there lieth a sholde before the havens mouth, and must runne in about to the fouthwardes of it: there standeth a little church on the north side, by the water side, and a Gentlemans house somewhat farther within the land, bring that church over the house, and then you are cleare of the shold, then faile in right with the point, and ancker in three fathome.



To the northwards of old Faſterborne goeth in a deepe, called Hull or Hullwater, it is a deepe haven for ordinarie ſhips, which goeth in moſt northeaſt in three or four fathome; you may ſound it in alongſt by the footſtrand of old Faſterborne in three fathome, leaving old Faſterborne on the ſtarboard ſide, it is there large and broad enough.

How men ſhall ſaile out of the Sound, through the ſhowldes or grounds, and into the Reefſhall.

HE that will ſaile out of the Sound towards the Showldes or Groundes let him goe on ſouth and by eaſt, or hee may ſound alongſt by the wood, in five or ſixe fathome, and then he ſhall not ſaile miſſe of the Norther buye for it lieth in five or ſixe fathome, on the north end of the Middle-grounds, to the eaſtwardes of the buye it is ſeven fathome deepe, but in the right farewaie thwart of this buye it is nine or tenne fathome deepe: the markes of this buye are, when that end of the wood is weſtſouthweſt from you, then you are thwart of the norther buye, and there ſtandeth then a flat ſteeple & pretie waies to the ſouthwardes of that wood: there commeth alſo three hommocks to the northſide of the towne, theſe are all markes of the norther buye.

From the Norther buye to the Middle buye the courſe is ſouth and by eaſt. When you come by the Middle buye, then commeth the ſouthermoſt mill on to the ſouthwardes of the towne of Coppenhaven, and the flat ſteeple commeth within a handſpikes length unto the ſharpe ſteeple, that are the markes of the Middle buye, or ſecond buye in the Showldes or grounds, it is there eight and nine fathome deepe.

From the Middle buye to the third, and ſo forth to the buye upon Caſper Caniell, the courſe is ſouth and by eaſt. When the white caſtle commeth over the ſharpe ſteeple, that are the markes of the fourth buye, or the buye upon the Caſper Caniell, the third lieth at the ſouth end of the Middle ground, it is not there verie broad, but ſteepe on both ſides, the deepe there aboutes is ſeven or eight fathome: If you muſt turne to windewardes there, you muſt caſt about, ſo ſoone as it doth beginne to ſhowlde, as wel on the one ſide as on the other.

The fourth buye lieth on the north end of Draecker, upon the flat, over againſt it lieth a rock above water, called the Fiſher, eaſt and by north from the buye, there you may wel ſound the Southholm, for it is there ſhowld water. Betwixt the third and this fourth buye commeth running out a channell from Coppenhaven, which men doe call Caſper Caniell, or the Kings deepe.

From the fourth buye or Caſper Caniell to Drakers riſſe the courſe is ſouth, and ſouth & by eaſt: the land of Draker you may ſound in three, four, or four fathome and an halfe.

The Riſſe of Draker lieth a good waies without Draker, it lieth of a halfe league eaſt into ſea. The markes of the buye upon Draker riſſe are theſe. When the ſteeple of Coppenhaven commeth to the ſouthwardes of Draker to the wood, then you are thwart of the buye. The ſhowldeſt water that you ſhall find betwixt this buye upon Draker riſſe, and the foreſaid fourth buye, is 5 fathome, two foot leſſe. For to ſaile by night through the ſhowlds, or grounds, go from the Iland Ween ſouth and ſouth and by weſt, ſo long untill that you come thwart of the point of the wood in four fathome, then keepe ſomewhat off from the ſhoare, and go on ſoutheaſt and by eaſt untill that you come in ſeven fathome, and then forth ſouthſoutheaſt untill you be over the Middle ground, the firſt or northermoſt buye, as is before ſaid, lieth in five or ſix fathome, but you may well goe over to the weſtwardes of it, in three or four fathome, keepe then ſomewhat of untill that you come in eight, nine or ten and eleven fathome, and ſail then on ſouth unto Caſper Caniell, there it will be by little and little ſhowlder, to wit, about 8 fathome. Thwart of Draker it is uneven for to ſound, the one caſt five, and the other 4 fathome, but go your courſe, except you knew that you were neerer the one ſhoare of Draker, or the Southholmes, then the other. Without Draker it will be againe 6 & 7 fathome deepe.

Eaſt. water 2 Booke.

A great halfe league right ſoutheaſt from the bny of Draker, lieth a blind rocke, 5 or 6 foot under water. Cornelius Yſen of Enckhuſen, in the yeere 1627 ſailed upon it. It is about 16 foot four ſquared, and hard by round about four fathom deep.

For to ſaile into Riſſholt or Coppenhaven comming from the northwards out of the Sound, run alongſt ſomewhat to the weſtwardes of the Norther buye, for to avoyd the plate, or Middle ground which lieth to the weſtwardes of the buyes in the Showlds, which upon the northend is not deeper then 12 foot, and on the ſouth end eight, nine, and at ſome places ten foot deepe, all hard ſtony & rocky ground, keepe the ſounding of the ſhoare on the weſt ſide in two, three, or foure fathome, ſo deep as you pleaſe, untill you come before Coppenhaven, on that ſide you can take no hurt, it is there broad and wide, and lieth in ſouth and by weſt; in the middeſt betwixt the ſhoare and the middle ground, it is 5, 6, and 7 fathome deepe. If you ſhould turn to windwardes there, then come not neerer the Middle ground then in four fathome, but the weſt ſhoare you may run to by your lead, as neer as you pleaſe.

From the north end of the Iland Draker runneth off a riſſe to the northwards, upon the point of that riſſe lieth a buye which men doe call the buye in the Reefſhall, leave that on the larboard ſide, and runne in untill you come before the towne, and anker there. If you come from the ſouthwardes, and will ſaile unto Reefſhall, then run alongſt to the eaſtwardes of the foreſaid fourth buye (which men doe call the buye upon Caſper Caniell) then looſe up preſently about by it, and go on n. w. into the kings deep, unto the buye in Reefſhall, which lie one from the other due northweſt and ſoutheaſt: you ſhall then alſo ſee right out a head, in the northweſt within the land a flat ſteeple right over a great houſe or Hoſpitall that ſtandeth cloſe upon the ſea ſide, keep them ſo one in the other, and ſaile right in with them, & ſo you ſhall runne in right amidſt the channell, it is there in the farewaie five, ſixe, ſeven, and eight fathom deepe. This Kings deepe is ſomewhat uneven of ground, therefore be carefull in uſing of the lead, and come not too neere the north ſide, that is the Middle ground, which is verie foule and rocky: from the ſouth ſhoare (about halfe waies betwixt the two foreſaid buyes) it lieth off ſomewhat ſhowld, ſo that you ſhall have at one caſt five or ſixe, and the other but three fathome.

When you come by the buye in the Reefſhall, which lieth upon the point of the norther riſſe of Draker, leave that on the larboard ſide, & run on ſouth about by it, unto Coppenhaven. The markes of this buye are theſe: there lieth a round hommock or great rock about half a league within the land, when that is right eaſt from you, then it commeth right with a flat ſteeple which ſtands about a league within the land, then you are even thwart of the buye, or point of the foreſaid riſſe. Theſe markes will ſerve at times when the buye lieth not there. A little to the northwardes of that buye lie the great ſhips which tarry for wind in five or ſixe fathome there is good anker ground.

From the buye upon Draker riſſe unto Kuyck the courſe is ſ. w. five great leagues but unto the riſſe of Faſterborn, or Steden, it is ſouth and ſouth & by weſt 5 leagues, in the farewaie betwixt Draker and Faſterborn it is 6, 7, and 8 fathome deepe, but between Faſterborne and Steden, 10, or 12, & 13 fathome, but by Steden deepeſt.

Vnder Steden you may anker as well to the ſouthwardes of it, for northerly, as to the northwardes for ſoutherly windes. If you will anker for northerly windes, then runne in betwixt Steden & Meun, a good waies into the baye, ſo that the ſteepe point of Steden lie about northnortheaſt from you, anker there in eight or nine fathome, and you ſhall lie landlockt for north and northweſt winds.

But if you will anker for ſouth or ſouthweſt windes, then anker to the northwardes of Steden, ſo that the ſoutheaſt point be ſouth and by eaſt, or ſouthſoutheaſt, and the northweſt point northweſt or weſtnorthweſt from you, there it is good lying in ſeven fathome, the ground is there ſmall white and black ſand. If you wil ſet ſaile from thence to the

showlds or grounds, then go not more northerly then north-east, so long untill that you come by the riffe of Draker, then run about by it in 5 fathome.

To the northwards of Steden the coast of Zeeland goeth in with a great bay into Kuyck, it is there all to the westwards showld water of five, fixe and seven fathome, and good ancker ground, so that you may ancker every where thereabouts.

Makes of the riffe of Falsterborne. The riffe of Falsterborne lieth off southwest to Seawards a league and a halfe. It is a fowle stony and rocky riffe, upon the end of it lieth a buye in foure fathome, you may run about by it upon your lead in five fathome with small ships of little draughts. Men doe hold for a mark of this riffe, that when the steeple of Falsterborn and the castle come one in the other, that then they are thwart of the point of the riffe. He that commeth from the northwards, and wil saile about Falsterborne with a northerly or northeast wind, and that he will come somewhat neere about the riffe, and commeth in five or fixe fathome, he must be verie quick in using the lead. When old Falsterborne church, commeth halfe waies to the castle and the church of Falsterborne, then beginneth to come the worst and showldst of the riffe, that lasteth untill that old Falsterborn church commeth to the eastwards of the houses of Falsterborne, before that you are not past the riffe. If you should luffe up sooner about by it, you should run in great danger with a ship of great draught, you shall have (comming against the riffe) the one cast four or five and then presently three fathome upon it, all hard stony ground. Therefore it is best with a ship that draweth 12 or 14 foot, to come no neerer this riffe then in 6 or 7 fathome.

If (when you come from the eastwards) you will saile about Falsterborne, and come alongst the shoare with a northeast wind in fixe or seven fathome, and Falsterborne is about north, or northnortheast from you, then it showldeth up verie fast in two fathome, or two fathome and a halfe. Therefore keepe you further off from the shoare in 10 or 12 fathome, so long untill that the Castle be northeast, or north-

east and by north from you, or that old Falsterborn church come half waie to the castle of Falsterborn, and Falsterborn church, then you cannot saile upon the riffe from the eastwards, but running about by it in 5 fathome, then you must be verie carefull in using your lead. But if you will come neere the riffe in four or five fathome, when old Falsterborne church commeth to the east end of Falsterborne, you shall runne in great danger for to come on ground. When you come within the riffe, you may runne alongst by the coast of Schoonen in 4 fathome without taking hurt.

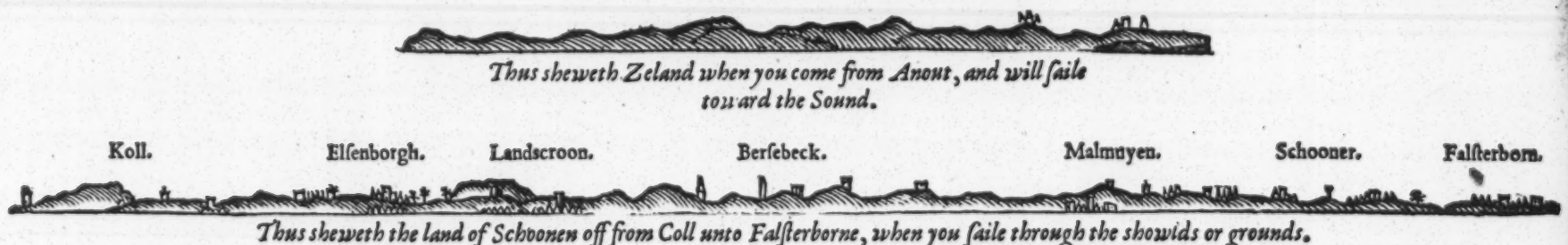
Of the streames on these coasts.

THrough the Sound and the showlds or grounds, the streame runneth commonly with the wind, but the most part of the time to the northwards, before the coming of a hard east wind, or when it hath blown out of the east, then the stream runnes stil out to the northwards,

Courses and distances.

From Coll to Elsenure the course is southeast, 3 south-east & by south 4 or 5 leagues.
 From Lapsand to Ween southsoutheast 3 leagues.
 From Elsenure to the norther buye in the showlds or grounds, south and by east 6 leagues.
 From Elsenur to Landscroon eastsoutheast 4 leagues.
 From Ween to Malmuyen southeast and southeast and by south 6 leagues.
 From Malmuyen to Reefsholme west 5 leagues.
 From Malmuy to Steden southsouthwest 8 leagues.
 From the buye upon Draker riffe to Kuyck southwest 5 great leagues.
 From the buye upon Draker riffe to Steden, the course is south and by west 5 great leagues.
 From the buye upon Draker riffe to the buye upon Falsterbornes riffe, the course is south 5 leagues.

How these lands doe shew themselves at sea.



C H A P. V.

For to saile from the Scaw into the Belt.

From the Scaw to Seabuy the course is south and by west fixe leagues, there it is upon the road four and five fathome deepe. Betwixt the Scaw and Seabuy lie the small Helmes foure leagues from the Scaw, & two leagues to the northwards of Seabuy. When you will saile into the Belt, you must leave them on the starboard side, going on still south and west untill thwart of Seabuy, you may also saile through betwixt the Helmes and the maine land unto Seabuy, if you will, there is at the showldst betwixt them, three fathome water, but about a seaboard the Helmes, betwixt the Helmes and the north end of Lefou, it is foure leagues broad, and in the channell ten fathome deepe soft ground.

The lying of the Helmes, and how men shall come to ancker there, and also of all depths, showlds, and dwale-grounds, betwixt the Helmes, the Scaw, and Lefou, together with the description of the Iland Lefou, and the risses that lie out thereabouts, is described in the third chapter of this booke.

Betwixt Lefou and Seabuy lie manie dwalegrounds, which are verie uneven of three, foure, five, and fixe fathome, the likeuneven and showld ground lie also within or to the

southwards of Seabuy, of foure, five, and fixe fathome, but the right channell through betwixt the dwalegrounds of Lefou, and the showlds of Seabuy is seven and eight fathome deepe.

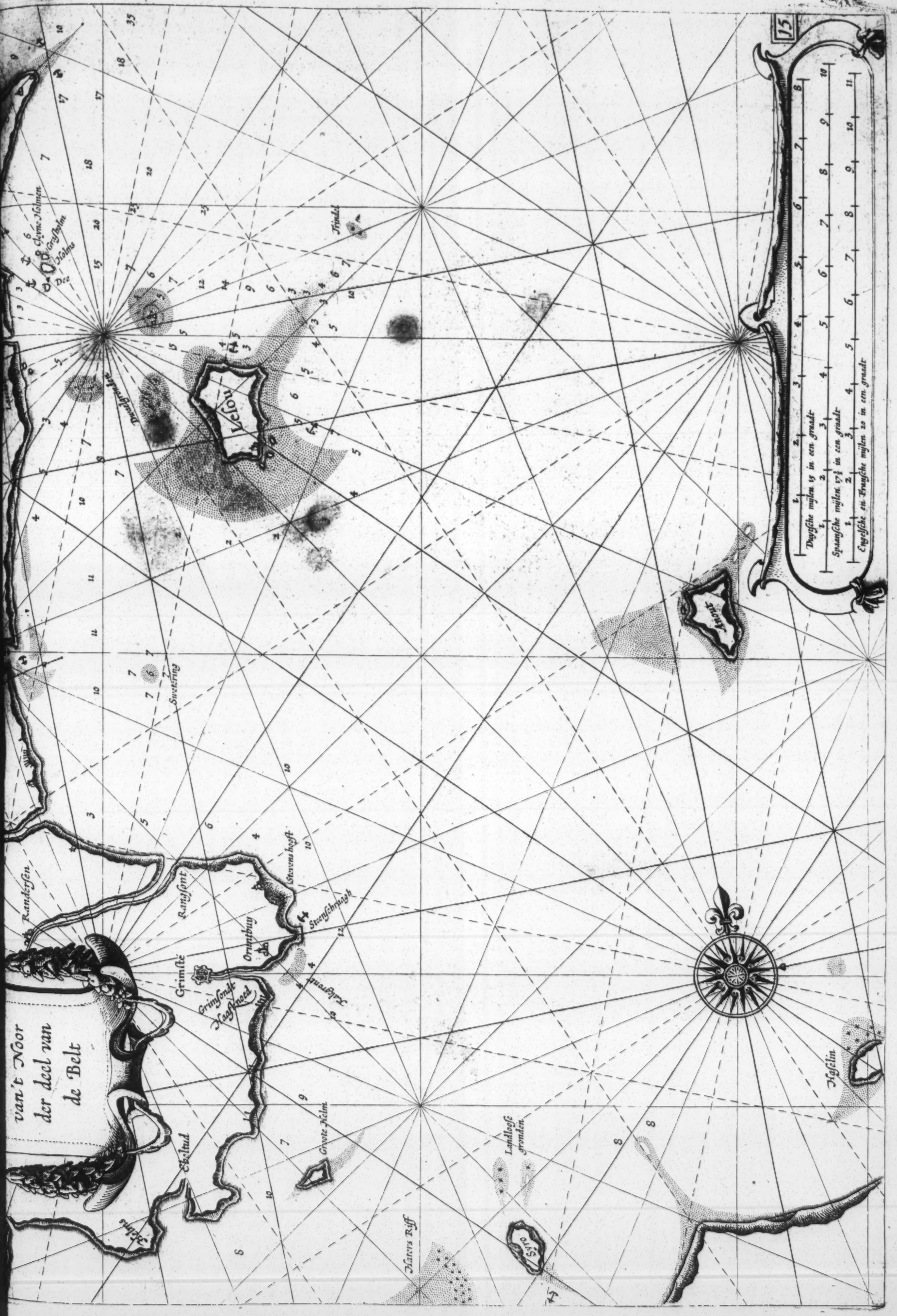
To the southwards of the small Helmes and Seabuy, neerer to the maine land then Lefou, lie also some uneven dwalegrounds, upon which there is no more water then ten, eleven, and at some places twelve foot. He that draweth but eight or nine foot need not feare of them.

From Seabuy to Aelburgher deepe, the course is south and by west seven leagues, upon the north side of the haven standeth a flat steeple called Hals, in the havens mouth lieth a buy, and upon the south land stand two capes, which you must bring one in the other, by them you shall find the buye, the channell lieth in first west and by south, about a cables length, the you must runne up northwest and west right unto Hals, and runne in by the north shoare, untill thwart of Hals, from the south point of the land shooteth off a flat which you must avoid: being thwart of Hals, you must goe southwest and by west unto the bight, and in the crooked channell you must shun the north shoare somewhat, and then againe n. w. and by west alongst by the north side, unto the second crooked, and them s. f. w. and afterwards w. f. w. unto the towne, in the comming in by the buye, it is two fathome. But for to sail in there, it is best to take a Pilot. By the south shoare goeth in also a little deepe of 6 and 7 foot.

The

For the
into the
burgh
deepe.

van't Noor
der deel van
de Belt



Duyfche mijlen 15 in een graad

Spanifche mijlen 17½ in een graad

Engelfche en Franfche mijlen 20 in een graad

The towne Aelburgh lieth up in the land foure leagues within the river. Also there lieth alongst this coast to the westwardes some banckes, there you must shunne the land somewhat.

The Swetering. When you saile from the Helmes to Stevenshead, through betwixt the dwale grounds and the flat of Seabuy, you shall meet with a showld ground about half waies betwixt Stevenshead and Seabuy of 5, 6, and 7 fathome. This showld is called the Sweteringh, & lieth about three leagues eastwards from Aelburgh deepe, the channell there betwixt them is about 10 or 11 fathome deepe.

From Aelburgh deepe to Hafelin, the course is southeast and by east about 20 leagues.

Stevenshead. From Aelburgh deepe to Stevenshead the course is south-east and by south about nine leagues. There betwixt them the land lieth in a great Bay, wherein lie the two little townes Mariacker and Randerfen: Mariacker lieth from Aelburgh deepe south and south and by west 4 leagues, and from Stevenshead five leagues. Betwixt Mariacker and Randerfen. Stevenshead lieth the River of Randerfen, which runneth up crooked farre into the land, unto the little towne Scandeburgh.

Hafelin. From Stevenshead to Hafelyn the course is eastsoutheast 13 leagues. Hafelyn is on the outer side full of showlds, riffes, and grounds. A larger description of Hafelin and Anout, as also of all the fowle grounds and showlds, lying there abouts, you shall find in the third chapter of this booke.

Oruntbuy. A little to the southwardes of Stevenshead lieth a little towne called Oruntbuy, there lie the Chalck-grounds right before the river of Grimfoud in a bay a little about the point of Stevenshead: that is a sand of two or three foot water, but not far off it, it is ten fathome deepe, you may found them in foure fathome. You may saile up into Grimfoud, unto Grimftee, that is a lading-place for Huyes.

Great Helm. From Stevenshead unto the great Helme the course is southsouthwest about fixe leagues. The land lies from Stevenshead unto the point of Ebeltud southsouthwest seven or eight leagues. Ebeltud is a little Towne lying within the

land thwart of the great Helme. Betwixt the great Helme and Iurland it is fixe and seven fathome deepe. Close by Stevenshead, and the point of Ebeltud it is eight, nine and also tenne fathome deepe. The great Helme hath two Riffes, one upon the northeast side, and the other upon the southwest side.

From Stevenshead to Siero the course is southsoutheast eight leagues, to the northwards of Siero lieth a ground loose from the land, divided into two riffes, which men must avoid. These two Riffes lie at some places above water.

From the southeast point of Siero lieth off a riffe towards Rufnes, it is on the east side very steepe and stonie, men may saile alongst hard by it upon eight or ten fathome, keeping a littel more then a ships length off from it. A littel there by-north from the riffe it is good lying for southerly winds, at five, six, seven, or ten fathome, flat faire and opgoing sand ground. Farther northward and round about you may set it, except to the southwards.

Courses and distances.

From the Scaw to Lefou southsoutheast	8 leagues.
From the Scaw to the Small Helmes south and by west	4 leagues.
From the Scaw to Seabuy south and by west	6 leagues.
From the Helmes to Seabuy	2 leagues.
From Seabuy to Aelburgher-deepe s. and by west	7 leag.
From Aelburgh-deepe to Mariacker south and south and by west	4 leagues.
From Aelburgh-deepe to Stevenshead southeast & by south	9 leagues.
From Aelburgh-deepe to Hafelin southeast and by east	20 leagues.
From Stevenshead to Hafelin eastsoutheast	13 leagues.
From Stevenshead to the great Helme southsouthwest, and south and by west about	6 leagues.
From Stevenshead to the point of Ebeltud southsouthwest	7 or 8 leagues.
From Stevenshead to Syro southsoutheast.	8 leagues.

How these lands doe shew themselves at Sea.



C H A P. V I.

For to saile through the Belt from Syro untill past Langheland.



Wero. From the great Helme unto the Iland Wero, the course is n. n. w. & s. f. w. foure leagues distant, there it is 4 and 5 fathome deepe. From Wero there runneth off a showld unto Kyholm, & about *Kyholm.* *Samps.* Kyholme: and also about the little Iland Samps, it is also full of showld grounds, which runne of unto the great Iland Sampsfo.

From the great Helm unto the Iland Sampsfo it is s. w. and n. e. foure or five leagues.

Sampsfo. From the north end of the Iland Sampsfo there shooteth off a little riffe north into the sea, you must found close about by it for to come into the road of Sampsfo, when you will ancker there. It is there in the road tenne fathome deep, and you shall be there under the Swangrounds sheltred for all windes.

Aerhuyfen. From the south end of Ebeltud to Aerhuyfen the course is west and by north, and w. n. w. 5 leagues. It is there all showld water of two and three fathome deepe. He that will ancker in the road before Aerhuyfen, let him bring the great steeple in the middest betwixt the two other sharp steeples, there is the best ground, and good road in three, four, or five fathome, so showld as you will. To the south-

wards of Aerhuyfen goeth in the Wedersound betwixt Iut- *Weder-* land and Sampsfo: he that will sail in there, must be well ac- *found.* quainted, for it is there all full of Riffes & showlds. You may not also use that farewaie by night, by reason of all the sands & showlds, and also by day you must be verie carefull and circumspect in looking out, and not spare your lead, but you may ancker and have road there everie where. When you wil sail through the Wedersound, comming off from the great Helme or Ebeltud, you must leave the Iland Tuns and the Swangrounds on the larboard side, running all along by the Iuttish coast in 2 or 3 fathome, untill past Horsens, or the Iland Endelau, which you may not saile to, nor come neer from the westwards by reason of all the grounds which lie before it on the west side. It is a narrow channell betwixt Endelau & the maine land, lying from the Wedersound through the Swangrounds south, it is on both sides showld, and but a creek for to saile through. *Swangrounds.*

When you come off from the Melfersound and will saile through the Wedersound, it is best to runne alongst by the Iuttish side untill thwart of the river of Horsens, then you must edge somewhat off there from the land, & saile right with the Iland Tons, and so you runne through betwixt the Norther and Souther grounds, leaving the Iland Tons on the starboard side. When you are then past Tons, you shall runne out close by the north point of Sampsfo, towards the land of Ebeltud, it is altogether one course from Horsens to Tons, and forth to Sampsfo, and the point of Ebeltud, to wit. n. e. and s. w. eight or nine leagues.

From



Pascaarte
van't zijderdeel
vande Belt.

Duytsche mijlen 15 voor een graad	1	2	3	4	5	6	7	8	9
Engelsche en Fransche mijlen 20 in een graad	1	2	3	4	5	6	7	8	9
Spansche mijlen 17½ in een graad.	1	2	3	4	5	6	7	8	9

Milver-
found.

From Horsens, or that Iland Endelau unto the Melverfound, the course is f. f. w. 6 or 7 leagues. The Melverfound is a deepe sound of 20 and 25 fathome, verie crooked to come into, it goeth in betwixt Fuynen and Iutland, which are both high lands. From the Iland Ebelo unto Melverfound the course is f. w. and southwest and by south five great leagues.

Ebelo.

From the road of Sampso to Ebelo the course is f. f. w. and southwest and by south 5 leagues. From the south end of Sampso to Ebelo the course is f. w. and by w. 4 leagues.

Roems.

From Sampso to Roems the course is f. e. & n. w. 5 leagues. The n. w. coast of Fuynen lieth f. w. and by west eight leagues. The little Iland Ebelo lieth off a league from the same, right before Bowens, but you cannot saile through betwixt the Iland and Fuynen. To the southwards of the Iland lieth a great rock under water, betwixt, this rock and the Iland is the road before Bowens in 8 & 9 fathome.

Road be-
fore Bowens.

Betwixt Syro and Wero lieth a dangerous riffe long & broad, lying further then half way to Syro. When you will runne through betwixt the two foresaid Ilands a wether of Ruffenes, you must leave at least the two third parts of the water on the side of Wero, and go in southsouthwest towards Roems, which is 9 leagues distant.

Haters
riffe.

The foresaid riffe is called Haters riffe, which is on the east side verie hard and stony, he that commeth off from Boltack, he shall runne close to the Iland Wero, for to avoid that riffe, the channell betwixt the riffe and Wero is not verie broad, and 3 fathome or 3 fathome and a halfe deepe. He that commeth from Roems or Rufnes, and will saile through Wero sound, let him bring the great Helm to the eastside of Wero, and keepe them so standing sailing on so right with them, he shall (so doing) take no hurt of Haters riffe. Betwixt Syro & Haters riffe and somewhat more southwardly, the ground is verie uneven of 5, 6, 7, 8 & 9 fathome. On the southside of Haters riffe it is good anckering for northerly winds in 6 and 7 fathome.

Rufnes and Syro lie n. n. e. and f. f. w. about foure leagues asunder.

From the point of Rufnes runneth of a little riffe to seawardes, but to the eastwardes of it betwixt Rufnes and Hadelin, lieth off a riffe at least two leagues into sea, which lieth dry at the end, and by it, it is verie steepe, close along by the end it is eight fathome deepe.

Callen-
burgh.

From Rufnes to Syro it is south and north 8 or 9 leagues. Betwixt Rufnes and Syro lieth Callenburgh, which is also a lade place, and about 2 leagues to the southwards of Callenburgh lieth a flat alongst the coast about a league from the shoare of 5 fathome depth.

Casseur.

From the east end of Syro runneth off a little riffe or ledge of rockes, and over against it commeth also a flat shooting of from the land, betwixt them both it is 4 and 5 fathome deepe. But behind or thwart of Syro lieth Casseur, a faire haven, where men do lie at the Kay, and let their goods be carried into the ship.

From Syro to Langeland the course is f. e. and by south 4 leagues distant. He that commeth alongst to the eastwardes of Wero, through the channell betwixt Wero and Haters riffe, and will saile to Roems, let him go on due south and by east, and then he shall runne alongst about an English mile to the eastwardes of the Boltack, and fall with the land a little to the eastwardes of Roems: likewise hee that goeth from Roems, or a little to the eastwardes of it, on north and by west, he shall fall betwixt Wero and Haters riffe right in the farewaie. Betwixt Roems and Fuynen you may run through in two fathom, but with great ships you cannot go through there.

Cartemon-
de.

From the north end of Fuynen shooteth off a little riffe about an English mile into sea. About a league east and by north from Roems lieth a showld of 3, 4, and 5 fathome, which is steepe, and showldeth up so suddenly, that a man not knowing of it, and finding it so by the lead, should be affrighted at it. To the southwards of Roems in the land of Fuynen lieth a little towne for to lade called Cartemonde. The haven goeth in from the eastwardes, & it is showld on the west side, there lie no buyes in the havens mouth,

there is no more water then five, fixe, or sometimes seven foot.

From Roems to Spro, or Knuytshead, the course is south Spro & by east, and f. f. e. 5 leagues. Betwixt Spro and Knuytshead it is 12 and 13 fathome deepe. But betwixt Roems and Spro it is 10 and 11 fathome deepe.

Even about to the southwards of the point of Knuytshead in Fuynen lieth the haven of Nyburgh, when you are about the point, you runne right up to the towne, about northwest, a league, there it is 6 and 7 fathome deepe. Men do lie there with ships to the Kay, & let their goods be carried in what they will.

From Knuytshead to Langeland the course is southeast 4 leagues, & then you leave Spro lying on the larboard side. From the f. w. end of Spro shooteth off a little riffe which you must avoid. At the north end of Langeland lie the little Ilands of the Frissell, which are round about verie foule. From Knuyts head to the Iland Tassing the course is south 4 leagues and then you leave the Frissell lying on the larboard side, and runne through betwixt the Frissell and Fuynen. If you be bound to Swineburgh, then go from the Frissell to the southeast end of Fuynen, on f. f. w. and you shall meet a little Iland which you may runne about on both sides of it, through betwixt Tassing and that little Iland, or you may runne alongst by the land of Fuynen untill that you come to the little town of Swineburgh, which lieth over against the Iland of Tassing. Over against the point of Fuynen lieth a little Iland called Olms, then you must go up to the westwards. You may also runne about on the other side of Tassing, and leave the Iland Arr with the fowle grounds (which lie betwixt Arr and the southeast end of Fuynen) on the larboard side of you, it is no deeper upon these grounds then sixe foot. Now when as that you shall come by the little Ilands Olms, or by the southeast point of Fuynen, then you must (as before is said) goe up to the westwards, about the point of Fuynen towards Woburgh. Vpon the southside of these foresaid grounds goeth also a Deepe through, west, and west and by south through betwixt the grounds and the Iland Arr: upon this Iland Arr lieth a little towne called Koppingh. This fowle ground it is three leagues long, and that Iland Arr is also three leagues long, they lie both of them east and west, and the Munck Iland lieth at the end of these grounds before Woburgh in Fuynen, which hath two risses, the one shooteth off from the southeast end east into sea, the other from the north point northeast into sea. When you saile through to the northwards of these grounds, to wit, betwixt Fuynen and these grounds, towards Woburgh, you shall also meet with the foresaid Munk, with another little Iland or two more, leave them lying on the larboard side, and runne all along by the land of Fuynen, about west & west and by north, unto the point of Askens, which is about five leagues distant from the southeast point.

From the east point of Askens unto the little Ilands Toreu and Areu, the course is west and by north. and west-northwest two leagues, these two little Ilands lie one over against the other, the one on the side of Iutland, and the other on the side of Fuynen, men runne through there betwixt two risses which run off one against the other, it is there 4 & 5 fathome deepe.

To the northwards or westwards of Areu lieth the sound of Haddersleu, which lieth in about west & by south, upon it lieth the town Haddersleu 2 leagues within the land.

From Areu or Toreu to Melverfound the course is north-northwest five leagues, which you must run into from the southwardes first westwardes unto the Sound of Coldingen, being a broad Sound, which goeth a league into the land, if you will goe through the Melverfound, you must leave it on the larboard side, & goe up to the eastwardes unto the towne of Mever, where you come then againe into a crooked channell. The Melverfound goeth out to the northwards with a verie crooked channell, and then you come out again upon the broad water to the northwardes of Fuynen, as is before said. You may also saile off from Areu into the sound of Aelfem alongst f. f. w. unto Apenrade, and then about

about behind the Iland of Aelfens untill you come into the found of Flensburgh.

The Melverfound and the little Iland Areu lie f. f. e. and n. e. w. one from the other.

To faile out of the Aelfen found from Areu or the Melverfound, then goe from Areu or Toreu unto the Roen east & by south three leagues and then through betwixt the Iland & Fuynen, that is alongst to the northwards of Roen, for you cannot go about to the southwards of it. The Roen is a bad & shold riff shooting off from Alfen, whereunto it is fast, the outer end of it lieth dry like Anout riff. From the Roen to Arr or Kopingh the course is southeast and by east five leagues.

From the f. e. end of Aelft shooteth off a great riffe towards Arr called the Poles riffe: you must runne through betwixt Arr & that riff, leaving two third parts of the water on the Alfen side, and one third part towards, Arr, and run on so with the southend of Langheland, untill that you come against Copen.

From Arr to the south end of Langheland the course is southeast and by east, and eastsoutheast four leagues. And from the Poles riffe to the south end of Langheland, the course is west and by south six leagues. You may runne through betwixt Langheland and Arr to the northwardes and come out again into the Belt by Nyburgh: from the southend of Langheland to Tassing, it is north & by west six leagues: you may sail about Tassing on both sides, and leave Arr and the foul grounds, lying on the one side of you. Upon these grounds it is but six foot deepe.

You may also faile through betwixt the foresaid grounds & Fuynen into the found of Aelfen, unto the little Ilands of Areu and Toreu, as hath been said here before.

From the little Iland Areu to Apenrade the course is southsouthwest five leagues. The found of Apenrade is a broad open found, upon which lieth the foresaid town of Apenrade.

From the river of Apenrade unto the crooked channell of Sonderburgh, which goeth in betwixt the Iland Aelfen and the maine land, the course is east three leagues, there you may faile through about behind the Iland of Aelfen to Sonderburgh, and then forth into the found of Flensburgh. It is verie narrow & crooked betwixt the Iland and the maine land, but when you are come through the narrow and crooked channell into the found of Flensburgh, there it is broader and larger.

The found of Flensburgh goeth in betwixt Sonderburgh and Holsterland, being a broad found. He that will faile in there, must take verie good heed of the Holsters side, when you begin to come betwixt the two lands, and runne in alongst by the land of Aelft, for from Nubell or Holsterland lie of the Chalckgrounds half waies the deepe. This found lieth in west and by south untill that you come before the river. There lieth in the rivers mouth a little Iland on the starboard side, you must runne in to the eastwards of it, and goe in west and by south, and west untill you come within the crooked channell of the River or Sound, and then you must goe up againe southwest, then you shall see the towne of Flensburgh lie before you.

How these foresaid places doe lie distant one from the other.

From the great Helm to Wero f. f. e.	4 leagues.
From the great Helme to Sampso f. w.	4 leagues.
From the south end of Ebeltud to Aerhuysen w. and by n. and w. n. w.	5 leagues.
From the road of Sampso to Ebelo f. f. w. and south and by west	5 leagues.
From the south end of Sampso to the Iland Ebelo the course is f. w.	4 leagues.
The n. w. coast of Fuynen lieth southwest and by w.	8 leag.
From Ebelo to Melferfound f. w.	5 leagues.
From Endelau to Melferfound f. f. w. somewhat southerly	6 leagues.
From Sampso to Roems f. e.	5 leagues.
From Syro to Rufnes f. f. w.	4 leagues.

East. waters 2 Booke.

From by west Syro to Roems southsouthwest and south & by west	9 leagues.
From Wero to Bultack f. f. w.	4 great leagues.
From Wero to Romps south & by east	8 leagues.
From Romps to Knuytshead f. and by e. and f. f. e.	5 leag.
From Knuytshead to Langeland f. e.	4 leagues.
From Knuytshead to the Iland Tassing south	4 leagues.
From the southeast end of Fuynen to the east point of Askens, west & west and by north	5 leagues.
From the point of Askens to the little Ilands of Areu and Toreu, w. and by n. and w. n. w.	2 leagues.
From Areu to Melferfound n. n. w.	5 leagues.
From the point to Rufnes in Zeeland to the Iland Syro south	8 or 9 leagues.
From Rufnes to Casser f. f. e.	9 or 10 leagues.
From Spro to Langheland f. e. & by f.	4 leagues.
From the north end of Langheland to the south end south	8 leagues.
From the southend of Langheland to the Iland Arr the course is n. w. & by w. somewhat westerly	4 leagues.
From the Iland Arr or Kopingh to the Roen, the course is n. w. and by west	5 leagues.
From the Roen to the little Iland Areu west and by north	3 leagues.
From Areu to Apenrade f. f. w.	5 leagues.
From the river of Apenrade to the Strait of Sonderburgh east	3 leagues.
From Sonderburgh to the Sley f. e. and by east	4 leagues.
From the south end of Langheland to Femeren the course is f. e. & by east	7 or 8 leagues.

CHAP. VII.

The description of the coasts of Holsten, Mekelenburgh, and the southermost Ilands of Denmark from the Belt unto the Ielle and FASTERBORNE.



O the southwards of the Sound of Flensburgh, lie yet three Sounds or rivers, where great ships may goe into, to wit the Sley, Nyllhofvoert, and the Sound of Kiel, the land lieth off from Flensburgh to Kiel southsoutheast or somewhat more easterly sixe leagues.

From Sonderburgh to the Sley the course is southeast and by east 4 leagues, that is, a broad deepe found lying in first about west, and when you are within it, then it runneth in about southwest and by west past Sleefwyke, there also come out many great ships. The town Gottorpe lieth also upon this river.

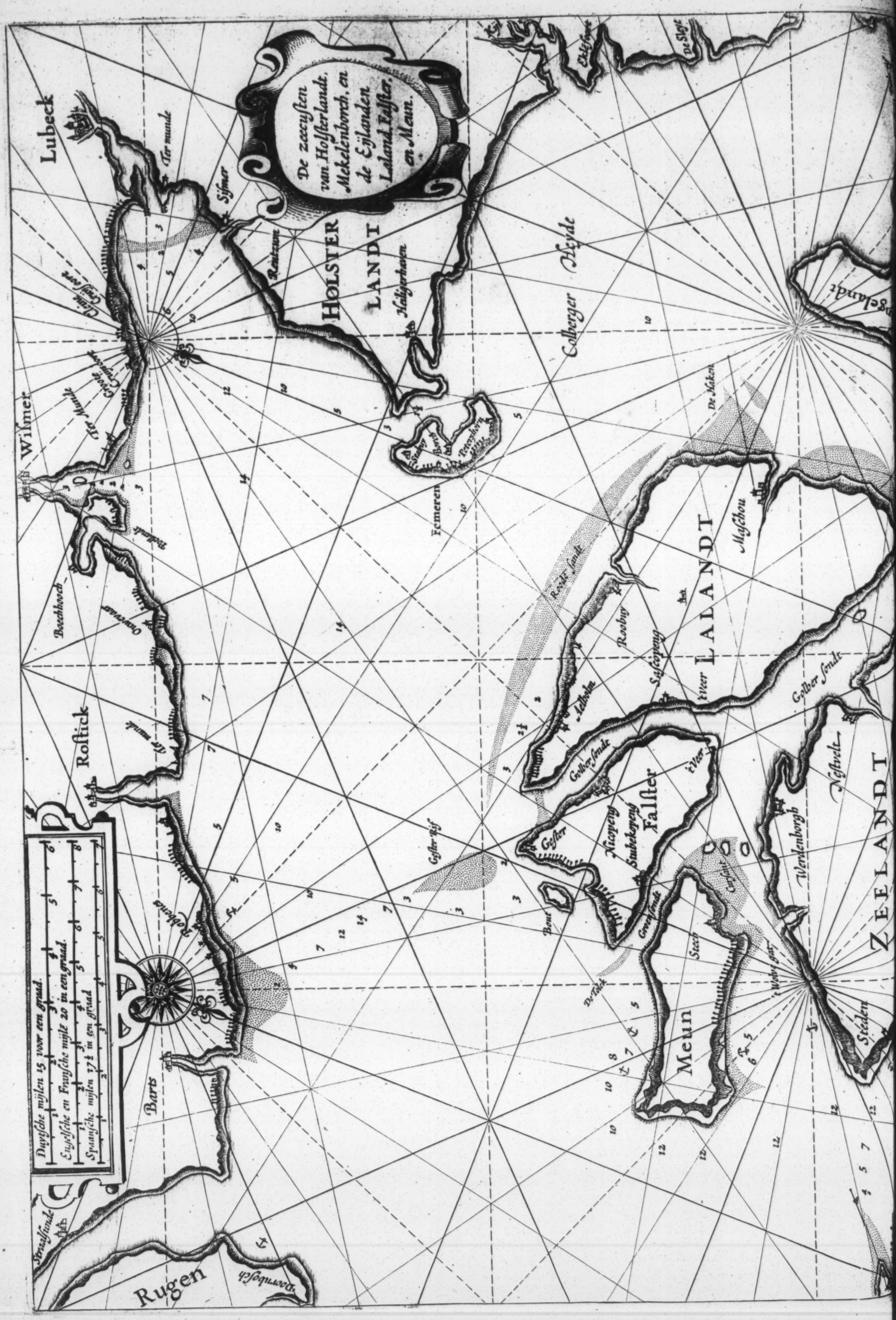
Betwixt the Sleye and Kiel lieth Nyllhofvoert, upon it lieth a little towne called Beckelenfoort.

The found of Kiel is a broad Sound which lieth in about southwest, there you may go in also with great shippes. From Kiel to the west end of Femeren it is east and by north about eight leagues.

From the Poles riff to Femeren (over the Coelbergher Heyd) the course is e. f. e. 13 or 14 leagues, but from the south end of Langheland unto Femeren it is f. e. and by east seven or eight leagues. The channell betwixt Femeren and Laland is five and six fathome deepe, you may faile round about Femeren, there it is all shold ground. Betwixt Femeren and Holsterland, you may runne through in eight or teene foot, there lieth a little towne called Heyligher haven where you may ancker with ships of small draughts for to lade wheat or barley. From the Iland Femeren to Geester riffe the course is east and by north ten leagues. But from Femeren to the Trave of Lubeck f. f. w. ten leagues: there goeth in a good Deepe for great shippes, it is deepe upon the banck 12 foot water.

There it is also a great bay and a good haven, where men may lie safe for all winds, except the northeast & north-northeast winds. From the Trave of Lubeck to Gester riff the course is northeast and f. w. about 19 leagues.

From the Trave of Lubeck to Wismer-deepe the course is first



De zeeuyften
van Holsterlandt,
Mekelenborch, en
de Eijlanden
Lolland, Falster,
en Meun.

HOLSTER
LANDT

LALANDT

Meun

Falster

ZEELANDT

Duytsche mijlen 15 voor een graad.
Engelsche en Fransche mijl 20 in een graad.
Spaansche mijlen 17½ in een graad.

Rugen

Rostock

Lubeck

Colberger Beye

Wendenborg

Nestvelt

Steden

Magdehou

Colber sonde

River

Sagkopeng

Stubeboeng

Gestor

Bout

Gestor

Stubeboeng

Gestor

Bout

Stubeboeng

Gestor

Bout

Stubeboeng

Gestor

Bout

Stubeboeng

Gestor

Bout

Stubeboeng

Gestor

Bout

Stubeboeng

Gestor

Bout

Stubeboeng

first northeast and by east, and then eastnortheast, there goeth in a faire deepe for all sorts of ships.

For to saile in at the deepe of Wismer, bring the steeple upon the south land south from you, and saile so in untill that the steeple standing upon the eastland, by that eastermost house, commeth to the five or six houses, by these houses stand some trees together, from that eastland runneth off a little riffe, lying off northwest & by north from it, when the steeple commeth to those houses, then goe in f. f. e. in that deepe is twelve foot water. In the Summer there lie two buyes in the havens mouth, the one upon the taile of the sand that shooteth off from the eastland, and the other upon the showld ground, you must runne in betwixt them. This deepe of Wismer lieth from Femeren south and by east distant about seven or eight leagues, but from Wismer to Gester riffe the course is northnortheast twelve or thirteene leagues.

About south from Gester riffe lieth Rostick, there goeth in also a good deepe of ten foot, it is there very flat, you may sound it in, on both sides with the sounding poll. Wismer and Rostick lie about eight or nine leagues asunder.

Somewhat to the eastwards of Rostick lieth a high land called Robbenesse, from it shooteth off a great riffe or showld to seawards, towards Gester riffe: it is betwixt Gester riffe and that showld not deeper then 12 or 13 fathome. If you come nearest to Gester riffe, then it doth showld up suddenly, but if you come nearest this showld, then it showldeth by little and little. Gester riffe, as hath been before said is a showld riffe, & runneth off at least three leagues into sea.

A little to the eastwards of this foresaid showld lieth Baerts, there goeth in a deepe of six foot, at the westpoint goeth off a riffe, which men must avoid.

Three or four leagues to the eastwardes of Baerts goeth in the Ielle, there men doe goe in to Mesound, or Straelsound, there is no more then six foot water. In the Ielle lie three buyes, which you must leave all on the starboard side, being past them eastwards, up unto the beacon upon the Iell, you must loofe up about by it, and saile to the middle plate, which you must leave also on the starboard side, and the south & by east unto Straelsound. Within the mouth of the deepe, it is twelve and fourteene foot deepe.

The Iland Langheland is about eight leagues long, and lieth south and north, to the eastwards over against it lieth the Golverfound; lying in to the northwards of Laland, al alongst up unto Nestvelt and Wordenborgh and commeth into the Greensound, and into the Wolvegat, and so againe into the East sea: Before the Golverfound lie three little Ilands, the one at the point of Laland, which is called Wedero, and is also fast to it with a riffe, so that men cannot saile through there betwixt them; to the northwards of it men do run into the Golverfound, leaving that Iland on the starboard side: the other two lie to the northwards of the foresaid Iland of Wedero, the one is called Arnis, and the other Ooms. Ooms is a little plaine Iland, but Arnis is the greatest, which lieth nearest to Zealand, and is full of trees. From the Iland Ooms, lieth off a riffe southwest to seawards which is a great league long, and upon the end flatte, which men may runne over by the lead. When you wil sail into the Golverfound you must leave these two Ilands lying on larboard side. The Iland Laland hath upon the west point over against the south end of Langheland, a riffe or Hooke, lying off from Laland at least half waies over the Belt: for to avoid that, you must runne alongst within an English mile to the eastwards of Langheland; or when that you leave the two third partes of the water on Laland's side, and the other third part on the side of Langheland, you shall not come to neare it. When you come from the southwards, & are bound into the Belt, & that then the steeple of Mascou, which standeth upon Laland commeth to stand northeast & by east from you, then you are past that riffe, & lieth to the southwardes of you: It is here in this channell betwixt Laland & the south end of Langheland, 5, 6, & 7 fathom deepe.

From the southend of Langheland to Femeren the course is southeast and southeast and by east distant 7 leagues.

When as you come off from Langheland and are past the East. water 2 booke.

riff or Hooke of Laland, then the south coast of Laland lieth east & west: alongst by it lieth a sand, which is called *Reed sand.* the Red-sand, & lieth alongst untill before Golverfound, which runneth in betwixt Laland and Gester.

To the northwards of this sand is a road of 14, 16 and 18 *Aelholme. Roobuy.* foot water, before the little townes of Aelholm and Roobuy, where men do lade Nuts and Barley.

Betwixt Laland & Gester, thwart of this Red-sand (as hath been said) runneth in the Golverfound, which men may run into, & come out again into the Belt, but in this found or channell there is little depth, there lieth a stone banck within, thwart over the channell. The little town Nicoppen *Nicoppen.* lieth upon the Iland Falster a league within Gester. From Gester shooteth off Gester riffe, at least three leagues into *Gester riffe.* sea, which is a showld riffe.

To the eastwards of Gester riffe lieth an Iland called Bout, it is there abouts al showld water, to wit, three and four fathome.

To the eastwards of Bout goeth in the Greene sound, by *Green-sound.* the little towne Stuybekuype, and commeth out again into the Belt to the northwards of Laland: the Green sound lieth in about west and west and by north in three fathome, there lieth a showld on the larboard side of the mouth of the Sound, called the Tolck, which men must avoide: you must *Tolck.* goe in to the eastwards of it, you may lead it in alongst by the land of Meun, in fourteene or sixteene foot, that foresaid towne Stuybekuype lieth about a league within the *Stuybekuype.* mouth of the channell.

From Gester rife to Meun the course is northnortheast eight leagues: but from Bout to Meun it is northeast about seven leagues.

From the Golverfound to Meun the land lieth in a bay, you may ancker there for a northeast, north, northwest and west wind, in five or six fathome. He that commeth out of the Sound, and is bound to the southwardes of Meun, may come so neare Meun as he will, and loofe up to the westwards by the point, and ancker where he please, in five or six fathome. On the north side of Meun you may also ancker in 6 fathome, behind a little riffe that shooteth off from the north point, for an east, f. f. w. & west wind it is there all over flat, and good ground.

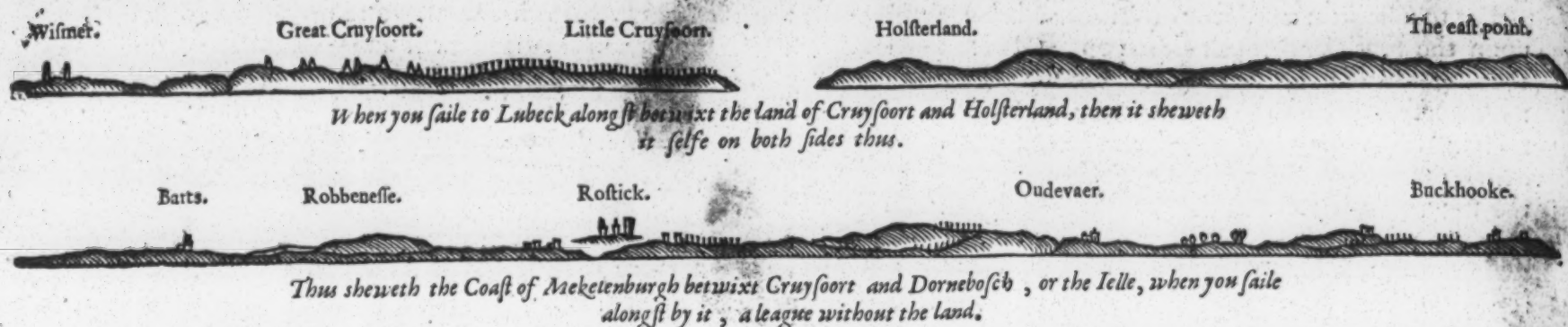
From Meun to Steden the course is northwest and by *Meun.* north four leagues, betwixt them both goeth in the Wolf-sound or the Wolvegat, that runneth past Werdenborgh and Nestvelt through the Golverfound out into the Belt.

Meun and Fasterborne lie north and by east, and south and by west five leagues asunder.

How these foresaid lands do lie one from the other.

From the south end of Langheland to Femeren the course is southeast and by east 7 or 8 leagues.
From the Pools-riffe lying on the Iland Aelst to Femeren the course is eastsoutheast 13 or 14 leagues.
From the Sleye to Kiel southeast 4 leagues.
From Kiel to Femeren the course is e. & by n. 8 leagues.
From Femeren to the Trave of Lubeck southsouthwest 9 or 10 leagues.
From the Trave of Lubeck to Wismer deepe the course is first northeast and by north, & then e. n. e. in all 9 leag.
From Rostick to Robbenes the course is n. e. 5 leagues.
From Robbenesse to Doornbosch n. e. and by e. 7 leagues.
From Femeren to Wismer-deepe south and by east 7 leag.
From Femeren to Rostick eastsoutheast 8 or 9 leagues.
From Femeren to Gester riffe east and by north 9 leagues.
From the Trave of Lubeck to Gester riffe n. e. 19 leagues.
From Wismer deepe to Gester riffe n. n. e. 12 or 13 leag.
From Rostick to Gester rife the course is north 7 or 8 leag.
From Gester riffe to Dornebosch east 9 leagues.
From Gester to Meun northeast 7 leagues.
From Meun to Steden northwest and by north 4 leagues.
From Meun to Fasterborne north and by east 5 leag.
From Meun to the buye upon Fasterborne riffe north 4 or 5 leagues.

How these Lands doe shew themselves at sea.



CHAP. VIII.

A description of the Coasts betwixt Fasterborne and Sandthamer, and the Ilandes Brontholme and Rugen.



Elburgh.

Now men shall sail about the riffe of Fasterborne hath been here before rehearsed. The Coast from Fasterborn eastwards lieth most east & by north, and eastnortheast. First from Fasterborn to Elburgh are three leagues. If you will anker before Elburgh, then bring the Cloyster and the church, within a fathom or a fathome & a half near one to the other, and saile so right in unto the towne, you may anker by it in four, three or two fathome and half.

Wistee.

From Elburgh to Wistede are seven or eight leagues. Betwixt them both, about three leagues to the westwardes of Wistee is a point, off from which lieth a showld, come no nearer it then eight or nine fathome. Wistee lieth in a bight, and hath a high sharp steeple. If you be bound thether, then bring the steeple north from you, & then sail in right with it towards the strand; there standeth a red tiled house to the eastwards of the bridge, bring that house, and the end of the bridge one in the other, and saile in so, and runne to the westwards of the bridge, and anker there in three fathome, or two foot lesse, there is cleane sand ground. When you come from the west, & are past that foresaid showld, then you may boldly runne alongst by the shoare in three fathom and an halfe, without feare.

Goesbeer.

Three leagues to the eastwards of Wistee lieth a high point called Goessebeer, from thence to Sandthammer is a league.

Sandthammer.

From the point of Goessebeer runneth off a great showld farre to seawards, and lieth alongst the coast, unto neare Sandthammer, you may found it in six, eight, and tenne fathome, as you will. When you runne over it in tenne fathome, then lieth the north end of Bronthollom about east from you, and the point of Sandthammers northnorthwest. Under the Sandthammers is good ankering for a west, westsouthwest, westnorthwest, and northwest wind, in five or sixe fathome. When you come out of the northeast you may runne alongst by this coast, with a northwest wind, in seven, eight, nine, or twelve fathome, untill past Goesbeer, for to avoid Bronthollom.

The point of Goesbeer and the north end of Bronthollom lie westnorthwest and eastsoutheast about five leagues asunder, but Wistee and the foresaid north end of Bronthollom w. & by n. and e. & by s. eight leagues asunder.

For to saile from Fasterborne about to the northwards of Bronthollom you must go on east so long, untill that you have the length of Wistee, then forth east and by north, and then you shal saile yet neer enough to the point & showld of Goesbeer, come no nearer it then 7 or 8 fathome. But to saile from Fasterborn to the southwards of Bronthollom, the course is east and by south, two and twentie or three and twentie leagues, & alongst the south side of Bronthollom eastsoutheast.

Bronthollom.

The Iland Bronthollom is cleane round about except on the southeast point, there runneth of a foule riffe, called Brewers riff, which men must avoid. On the northeast side

you may runne alongst by it upon your lead, without doing amisse, in 12, or 13 fathome, & alongst the southwest side in 8 or 9 fathome.

Men may anker round about Bronthollom, at divers places, as before Rottum, and to the northwards, before the Castle, thwart of Sandtwick, Suoux and Nex.

Before the Village, betwixt Rottum, and the castle that standeth upon the northwest point, is good ankering for an east or northeast wind, in 13, 14, and 15 fathome, but not verie cleane ground.

Thwart of the Castle it is good lying for an eastnortheast, east, and southeast wind in 18 and 20, and also 14 and 15 fathome, sand ground, but nearer the shoare the ground is not verie cleane, the nearer to the shoare, the fouler ground.

Under the northwest point before Sandtwick there is good ankering for southwest windes, and you may come neare unto that point. From the northwest point to the other point the shoare lieth eastsoutheast & westnorthwest.

On the east side is good ankering before Suoux & Nex, but before Nex it is not verie cleane. By Nex runneth off a little riffe from the shoare, which is steepe on both sides: but if you come no nearer it then in tenne fathome, you can take no hurt of it: to the northwards of Nex lieth also a great rock. He that will anker before Nex, let him anker so, that the flat steeple which standeth above Nex, doe stand betwixt the w. & w. and by s. from him, and that the north point be north and by west, and the south point be southsouthwest from him, there it is 22 fathome deepe, and clean sandground. At many other places it is otherwise stonie & rough ground, with southwest and westwindes you have there a weather shoare.

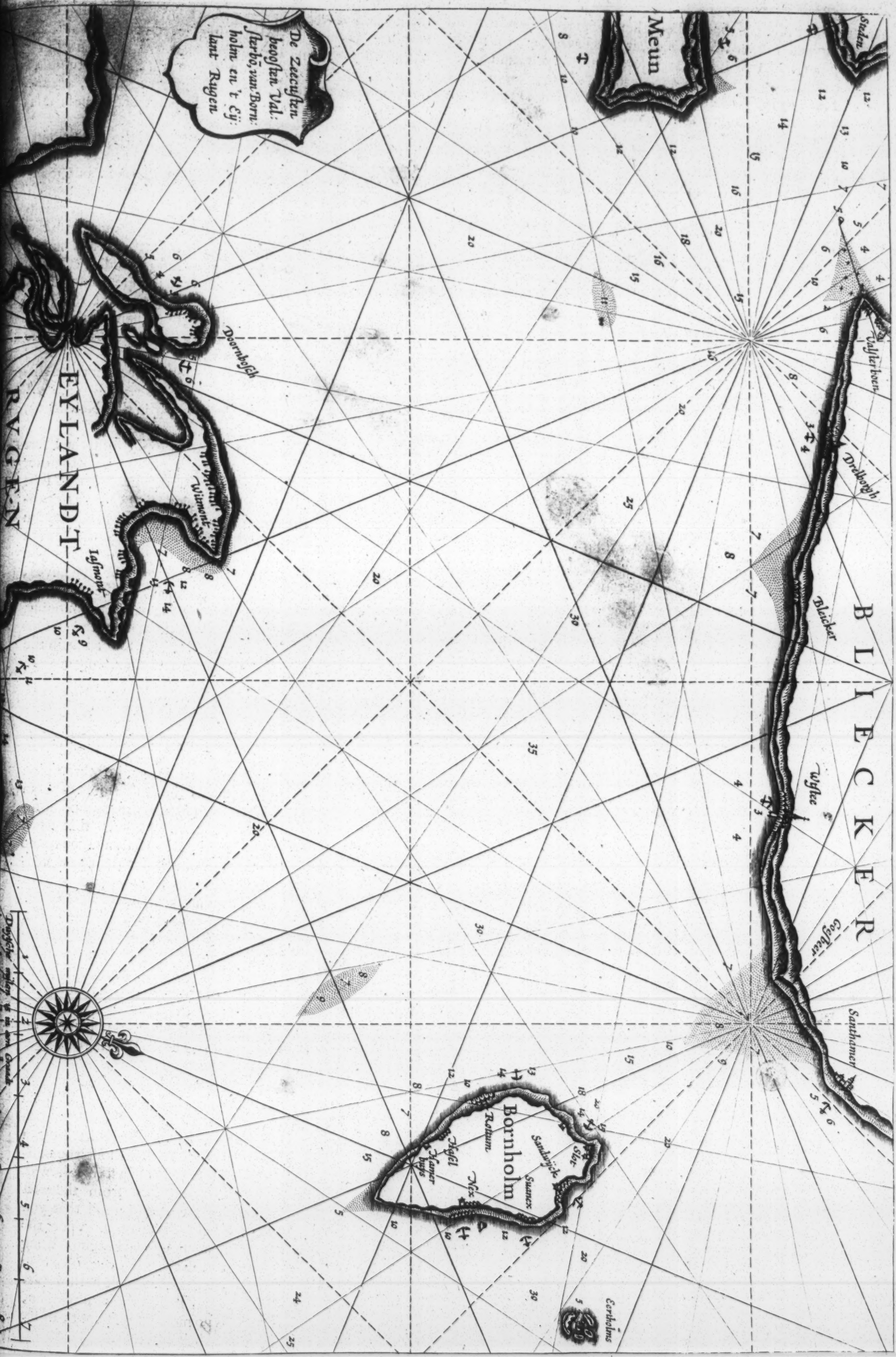
The Eertholmes lie from the north end of Bronthollom east & by north & west & by south four leagues asunder, & from the southeast end south and north five leagues. In the Eertholloms is a little haven, but by reason that it is not used it is unknowne.

Of the Iland Rugen.

To the westwardes of the Iland Rugen men do saile up into the Ielle unto Straelsound. For to sail from Straelsound out alongst the Ielle, goe on north, and north & by west, there lieth a Middle ground, sometimes there standeth a beacon upon it, and sometimes not, leave that on the larboard side, being past that, saile to the point where the wood standeth upon, so that the towne come behind the wood, you shall then see a verie high tree, bring that over the flattest steeple, and keep it so a while standing, going on still north, and north and by west unto the beacon upon the Ielle. When as you loofe up about by it west, then looke out forth two trees, which stand upon the east shoare, somewhat within the land, bring them a ships length without the highest tree, which standeth upon the shoare, and loofe up about the beacon, towards the buye. In the mouth of the deepe lie three buyes, which in sailing out you must leave all on the larboard side, but in sailing in all on the starboard side. It is not deeper in the mouth of the Deepe then six and seven foot, and also without, it is farre off showld water.

The Iland Rugen hath four pointes that lie out, under which men may ride at divers places, as Dooanbosch, Witmond, Iasmond and the Peert.

The



Dornbosch. The point of Doorenbosch lieth from the Ielle north and by west distant two leagues, it is high land with a steepe point, men may ride under it for northeast, east, and south-east windes. If you will ancker there, then ancker in three four, or five fathome, so that the steepe point stand north-northeast from you, or that the church stand over the Point, or ancker where about that it shall please you, or shall be best convenient, it is there al over shallow water & cleane sand ground.

From Dornbosch to Brontholom the course is northeast and by east, seventene or eightene leagues, but Dornbosch and Easterbornes Riffe lie northnorthwest and south-southeast fourteene leagues asunder.

From Dornbosch to Witmond the course is northeast & by east 4 leagues. Betwixt them both goeth in a great Bay, where you may runne in alongst by Witmond, & have road there in 5 or 6 fathom, for s. w. south, & also for a east wind.

Road under Witmond. If you will seeke road under Witmond for westerlie windes, & run about by the point coming from the westwardes, then come not nearer the point, then 7 or 8 fathome, there shooteth off an uneven showld, which you must avoid, being come about the point, ancker there in 12, 13, or 14 fathome, that is about a league from the shoare, nearer to the shoare in 7, 8, or 10 fathome the ground is not cleane, in twelve fathom you have grosse sand, in 13 or 14 fathome soft ground, so that with hard windes you should need to shoe your anckers, you lie there also landlockt for a west and south wind.

Road under Iasmond. Iasmond lieth from Witmond eastsoutheast distant two leagues. Thwart from the point of Iasmond, a quarter of a league from the wall, lieth a dry place called Souncken sand, upon which is no more then five foot water, betwixt the wal and this sand you may sail thorough, it is there deep anouch.

If you will ancker under Iasmond, for a west or west or westnorthwest wind, then saile so far about the point, that it come to be northnorthwest, or somewhat more northerly from you, when you come about the point, you shall see in the southwest or somewhat more westerly from you, a little

thick wood of trees, upon a plaine hill, and on each side of that little wood, a little sharpe steeple, and also a great tree, like as if it were a mil without wings, when that tree cometh to be southwest & by west from you, ancker therein nine, or tenne fathome, there is indifferent ground, according as the ground is there, by the point of the land, it is about 13 fathome deepe.

Or bring the north point northwest, and the other point southwest and by south from you, and ancker there in tenne or eleven fathome, there it is good soft ground, but it lasteth not long, so soone as you find the soft ground you must let fall your ancker, for the ground is there at manie places not cleane, or you must saile farre about both the points, there you lie landlockt for a northwest and northwind, in 10, 11 or 12 fathome, good soft ground.

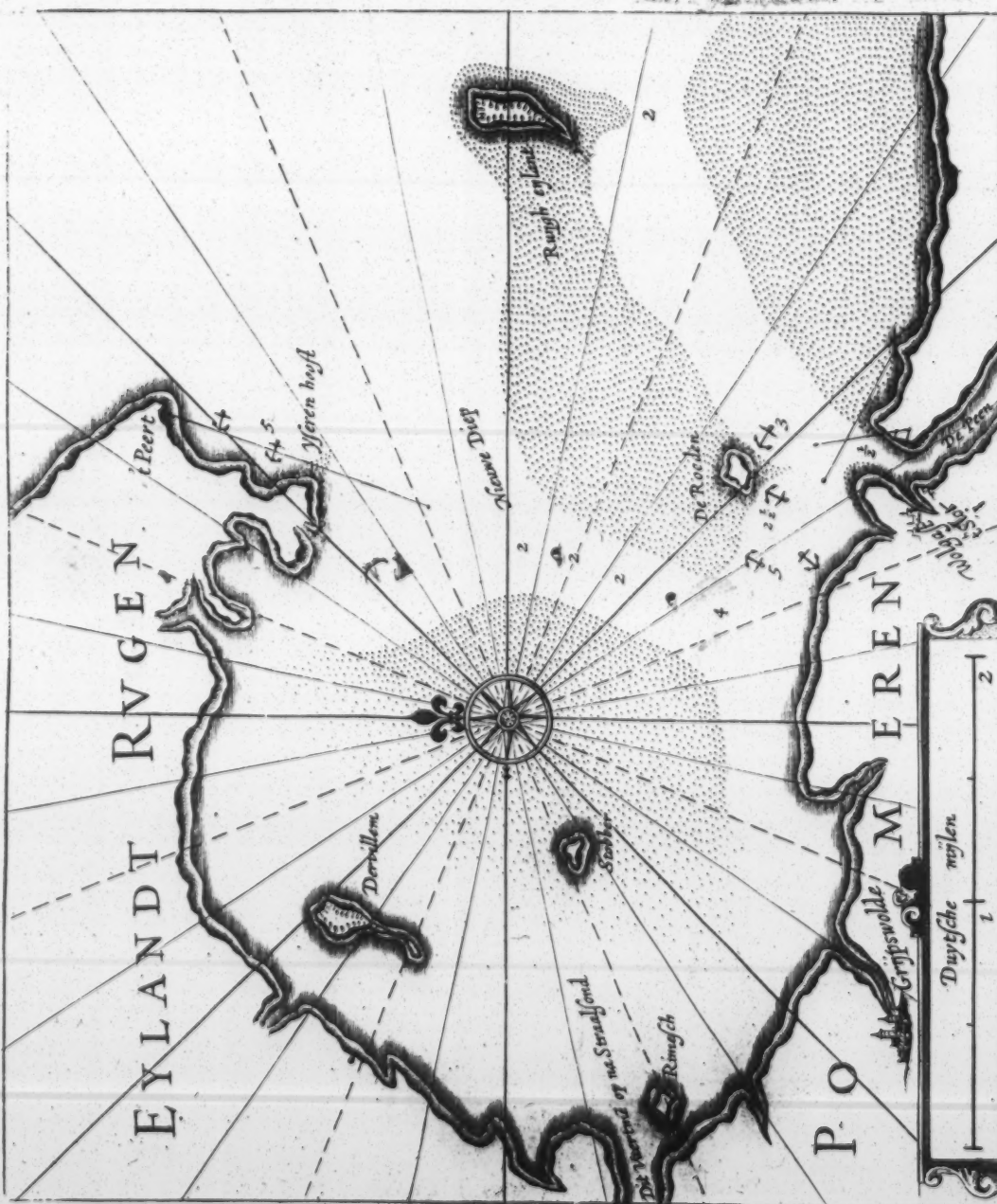
The Peert, which men doe also call the great Buck upon Iasmond, is a tuffe off trees or two, & is a point that lieth out with two points, where is betwixt them both a faire Sandbay, where is good lying in four or five fathome cleane ground.

Iasmond and the Peert lie southsoutheast & northnorthwest distant three leagues.

To the southwards of the Peert goeth in that Newdeepe, where men doe saile through to Statyn.

About a league south, somewhat westerlie from the Peert lieth a point, called the Ironhead, there lieth off a little riffe, therefore you must runne alongst somewhat without that point, and being a little past that point, you can see the outermost buye of the New deepe, wherein lie two buyes in middest of the deepe, so that you may sail alongst on both sides of the buyes, but with shippes of great draughts you must runne close alongst to the eastwards of the buyes, there is the verie deepest of the channell. By the outermost buye, it is at the showld, there is the barre, commonly there is eleven foot water, or a little more then eleven foot and a halfe, and sometimes also well twelve foot, but in the middest of the mouth of the deepe it is commonly still 12 foot, and sometimes more.

The Newdeepe.



Vpon the Peert lie three high hommocks the westernmost of them is the greatest, one great round hommock, when you keep that right without the Ironhead and then runne on southsouthwest, then you cannot saile amisse, although there were no buyes in the mouth of the Deepe.

When you come over the Barre, you shall find againe four & five fathome depth, being a little over it, you must go on s. e. unto the entrance of the Peen, with that course you leave the Iland of the Roeden lying at least two cables lengths on the larboard side, It is there all over good anckring.

If you will saile into the Peen you shall espie (sailing thus) right out a head at the east side of the Peen, two pointes, keepe the easternmost a handspikes length without the westernmost (for to avoid a stonie showld, which runneth off from the west point of the Peen) untill that you come before the Peen. Vpon the east shoare stand two beacons, bring them one in the other, and runne so into the Peen, which lieth in first southwest: but in the coming in, there is no more then six foot, or six foot and half water.

If you

If you will ancker under the land the Roeden, you must be minde full of a little riffe, that lieth off from the Roeden to the southwardes, towards the maine land, ancker there, either to the westwardes or to the eastwardes of it, according as the wind shall be, in three fathome, or two fathome and a halfe, so shold or deepe, as you please, there is the common road for the ships.

The Rough Iland lieth from the Roeden northeast and by east distant about two leagues.

About eastnortheast from the Roeden lieth also a channell into the sea, a little to the southwardes of the Rough Iland, that is good for to runne out with westerly windes, when you cannot come out at the New deepe, & also for those that are bound to Danske, or to the eastwardes. From the Rough Iland lieth off a little riffe to the southwardes, which you must avoid, & runne through betwixt that and the shold which runneth from the shoare, thwart of it is the barre or shold of this channell not lesse then eleven or twelve foot water, that is a short out-let, being over, you shall gette presently deeper water. This channell is Pilots water. Vpon the Iland the Roeden dwell Pilots, which doe bring out the shippes there. The Coast of Pomeran lieth from the New deepe to Colsbergen east and west about sixteen or seventeen leagues.

Betwixt them both lie yet two channels, the Swinne, and the channell of Camin. The Swin lieth seven leagues eastwardes from the Newe deepe, which runneth through with a little River into the Haff or broad water, right over against the River of Stetin. Camin lieth five leagues to the eastwardes of the Swin, upon the east end of the Haffe or broad water of Stetin: that channell goeth through also with a river in to the Haff.

Four or five leagues without the land, when Iasmond is west, or there about, the Peert westsouthwest, and the Rough Iland southwest and by west from you, there lieth a banck off seven fathome, upon one place somewhat lesse, and upon an other somewhat more, betwixt it and the land towards Iasmond it is again thirteen, fourteene, and fifteene fathome deep, but to the eastwardes of the Newdeep, alongst by the coast of Pomeran, it is all shold water, of four, five, fixe and seven fathome, so farre into the sea, that when you can but even see the land of the Swin, there it is not deeper then seven or eight fathome, without sight of the land it is twelve and thirteene fathome deepe.

Of the grounds and depths about these places.

Betwixt FASTERBORNE and BRONTHOLLOM it is thirtie, and five and thirtie fathome deepe, in the faire waie, but when you beginne to come neare FASTERBORNE, there it is sholder water of fourteene, fifteene, and sixteene fathome.

When you (comming from the west) faile alongst by the south side of BRONTHOLLOM eastsoutheast about a league without the land, and that the east end of BRONTHOLLOM is east somewhat southerly about two leagues from you, there it is deepe seven or eight fathome grosse pale sand, that lasteth untill that the foresaid east end be east, and east & by north about a league and a halfe from you, all in one depth, but when it commeth to be eastnortheast from you, it is fifteene fathome deepe, smal blackish sand ground.

Four or five leagues from BRONTHOLLOM, when the east end (from which BREWERS RIFFE runneth off) is about eastnortheast or northeast and by east, and the north end about north, or north and by east from you, there lieth a banck of seven, eight or nine fathome, and lieth northwest and southeast more then a great league long, the southermost end lieth about southwest from the east end of BRONTHOLLOM. He that

meeteth with this banck by night, may make some gessing thereby, for to direct his course thereafter, whether he be bound eastwards towards REEFOLL, or towards FASTERBORNE.

About two leagues eastsoutheast from the foresaid east end of BRONTHOLLOM (to wit the lowe sand point, wher BREWERS-RIFFE lieth off) there it is four and twentie and five and twentie fathome deepe, stonie ground.

About four leagues east somewhat northerly, or east and by north from MEUN, lieth a banck of eleven and twelve fathome, which lasteth from thence with a northwest and by west course, untill that MEUN come to be westsouthwest, or southwest and by west from you, then it is again eighteene, nineteene and twentie fathome deepe, soft ground.

FASTERBORNE shall then be northnorthwest and STEDEN westnorthwest from you, going on with that same northwest & by west course, you shall then get by little and little sholder water, to wit, sixteene and fifteene fathome, & close by STEDEN fourteene, thirteene and twelve fathome. He that commeth from WITMONDT or IASMONDT towards the Sound, and runneth alongst four league without MEUN, runneth alongst over this foresaid banck, he that findeth himselfe by night upon it, hath a goodmarke for to make his reckoning thereafter.

How these foresaid lands doe li one from the other.

FROM VASTERBORNE to Elburgh east and by north and eastnortheast	4 leagues.
From Elburgh to Wittee eat & by north, and eastnortheast	8 leagues.
From Wittee to Goesbeer e. n. e.	3 leagues.
From Goesbeer to Sarpthamer n. e.	1 league.
From Vasterborne, & from the riffe to Brontholom east	20 leagues.
From Vasterborne to the northwards of Brontholom east and by north	20 leagues.
But to the southwards of Brontholom east, and east and by south	23 leagues.
From Wittee to the north point of Brontholom east and by south	8 leagues.
From MEUN to Brontholom east and by north	21 leagues.
From Steden to the north end of Brontholom east and by north	24 leagues.
From Vasterborne to Whitmond southeast	19 leagues.
From Vasterborne to Dornbosch southsoutheast somewhat easterlie	13 or 14 leagues.
From MEUN to Whitmont e. f. e.	12 or 13 leagues.
From MEUN to Dornbosch f. e.	9 leagues.
From the Iell to the point of Dornbosch north and by west	2 leagues.
From Dornbosch to Whitmond the course is northeast and by east	4 leagues.
From Witmond to Iasmond e. f. e.	3 leagues.
From Iasmond to the Peert f. f. e.	3 leagues.
From Dornbosch to the north end of Brontholom north-east, easterlie	19 leagues.
From Dornbosch to the south end of Brontholom north-east and by east	19 leagues.
From Witmond to the north end of Brontholom north-east and by north	14 leagues.
To the south end north-east and by north	13 leagues.
From Iasmond to the south end of Brontholom north-east	13 leagues.
From the Peert to the south end of Brontholom north-east and by north	14 leagues.
From Iasmond to Camyn e. f. e.	19 leagues.

How these Lands doe shew themselves at sea.



Brontholom sheweth it selfe thus, when you come from the west.

If you will ancker under he Iland the Roeden, you must be minde full of a little riffe, that lieth off from the Roeden to the southwardes, towardes the maine land, ancker there, either to the westwardes or to the eastwardes of it, according as the wind shall be, in three fathome, or two fathome and a halfe, so shold or deepe, as you please, there is the common road for the ships.

The Rough Iland lieth from the Roeden northeast and by east distant about two leagues.

About eastnortheast from the Roeden lieth also a channell into the sea, a little to the southwardes of the Rough Iland, that is good for to runne out with westerly windes, when you cannot come out at the New deepe, & also for those that are bound to Danske, or to the eastwardes. From the Rough Iland lieth off a little riffe to the southwardes, which you must avoid, & runne through betwixt that and the shold which runneth from the shoare, thwart of it is the barre or shold of this channell not lesse then eleven or twelve foot water, that is a short out-let, being over, you shall gette presently deeper water. This channell is Pilots water. Vpon the Iland the Roeden dwell Pilots, which doe bring out the shippes there. The Coast of Pomeran lieth from the New deepe to Colsbergen east and west about sixteen or seventeen leagues.

Betwixt them both lie yet two channels, the Swinne, and the channell of Camin. The Swin lieth seven leagues eastwardes from the Newe deepe, which runneth through with a little River into the Haff or broad water, right over against the River of Stetin. Camin lieth five leagues to the eastwardes of the Swin, upon the east end of the Haffe or broad water of Stetin: that channell goeth through also with a river in to the Haff.

Four or five leagues without the land, when Iasmond is west, or there about, the Peert westsouthwest, and the Rough Iland southwest and by west from you, there lieth a banck of seven fathome, upon one place somewhat lesse, and upon an other somewhat more, betwixt it and the land towards Iasmond it is again thirteen, fourteene, and fifteene fathome deep, but to the eastwardes of the Newdeepe, alongst by the coast of Pomeran, it is all shold water, of four, five, fixe and seven fathome, so farre into the sea, that when you can but even see the land of the Swin, there it is not deeper then seven or eight fathome, without sight of the land it is twelve and thirteene fathome deepe.

Of the grounds and depths about these places.

Betwixt Vasterborne and Bronthollom it is thirtie, and five and thirtie fathome deepe, in the faire waie, but when you beginne to come neare Vasterborne, there it is sholder water of fourteene, fifteene, and sixteene fathome.

When you (comming from the west) saile alongst by the south side of Bronthollom eastsoutheast about a league without the land, and that the east end of Bronthollom is east somewhat southerly about two leagues from you, there it is deepe seven or eight fathome grosse pale sand, that lasteth untill that the foresaid east end be east, and east & by north about a league and a halfe from you, all in one depth, but when it commeth to be eastnortheast from you, it is fifteene fathome deepe, smal blackish sand ground.

Four or five leagues from Brontholme, when the east end (from which Brewers riffe runneth off) is about eastnortheast or northeast and by east, and the north end about north, or north and by east from you, there lieth a banck of seven, eight or nine fathome, and lieth northwest and southeast more then a great league long, the southermost end lieth about southwest from the east end of Bronthollom. He that

meeteth with this banck by night, may make some guessing thereby, for to direct his course thereafter, whether he be bound eastwards towardes Reefcoll, or towards Vasterborne.

About two leagues eastsoutheast from the foresaid east end of Bronthollom (to wit the lowe sand point, wher Brewers-riffe lieth off) there it is four and twentie and five and twentie fathome deepe, stonie ground.

About four leagues east somewhat northerly, or east and by north from Meun, lieth a banck of eleven and twelve fathome, which lasteth from thence with a northwest and by west course, untill that Meun come to be westsouthwest, or southwest and by west from you, then it is again eighteene, nineteene and twentie fathome deepe, soft ground.

Vasterborne shall then be northnorthwest and Steden westnorthwest from you, going on with that same northwest & by west course, you shall then get by little and little sholder water, to wit, sixteene and fifteene fathome, & close by Steden fourteene, thirteene and twelve fathome. He that commeth from Witmond or Iasmond towards the Sound, and runneth alongst four league without Meun, runneth alongst over this foresaid banck, he that findeth himselfe by night upon it, hath a goodmarke for to make his reckoning thereafter.

How these foresaid lands doe li one from the other.

From Vasterborne to Elburgh east and by north and eastnortheast	4 leagues.
From Elburgh to Wittee east & by north, and eastnortheast	8 leagues.
From Wittee to Goesber e. n. e.	3 leagues.
From Goesbeer to Sarthamer n. e.	1 league.
From Vasterborne, & from the riffe to Bronthollom east	20 leagues.
From Vasterborne to the northwards of Bronthollom east and by north	20 leagues.
But to the southwards of Bronthollom east, and east and by south	23 leagues.
From Wittee to the north point of Bronthollom east and by south	8 leagues.
From Meun to Bronthollom east and by north	21 leagues.
From Steden to the north end of Bronthollom east and by north	24 leagues.
From Vasterborne to Whitmond southeast	19 leagues.
From Vasterborne to Dornbosch southsoutheast somewhat easterlie	13 or 14 leagues.
From Meun to Whitmont e. f. e.	12 or 13 leagues.
From Meun to Dornbosch f. e.	9 leagues.
From the Iell to the point of Dornbosch north and by west	2 leagues.
From Dornbosch to Whitmond the course is northeast and by east	4 leagues.
From Witmond to Iasmond e. f. e.	3 leagues.
From Iasmond to the Peert f. f. e.	3 leagues.
From Dornbosch to the north end of Bronthollom northeast, easterlie	19 leagues.
From Dornbosch to the south end of Bronthollom northeast and by east	19 leagues.
From Witmond to the north end of Bronthollom northeast and by north	14 leagues.
To the south end northeast and by north	13 leagues.
From Iasmond to the south end of Bronthollom northeast	13 leagues.
From the Peert to the south end of Bronthollom northeast and by north	14 leagues.
From Iasmond to Camyn e. f. e.	19 leagues.

How these Lands doe shew themselves at sea.



Bronthollom sheweth it selfe thus, when you come from the west.



Thus sheweth Witmondt, when you saile alongst by it, being three leagues off from it.



The Eertholmes being east from you shew themselves thus.



The Eertholmes being n. n. e. from you shew themselves thus.



Thus sheweth Iasmondt when you saile alongst by it, being three leagues from the land.



In this forme arriveth the Eertholmes being north from you.

Witmondt.

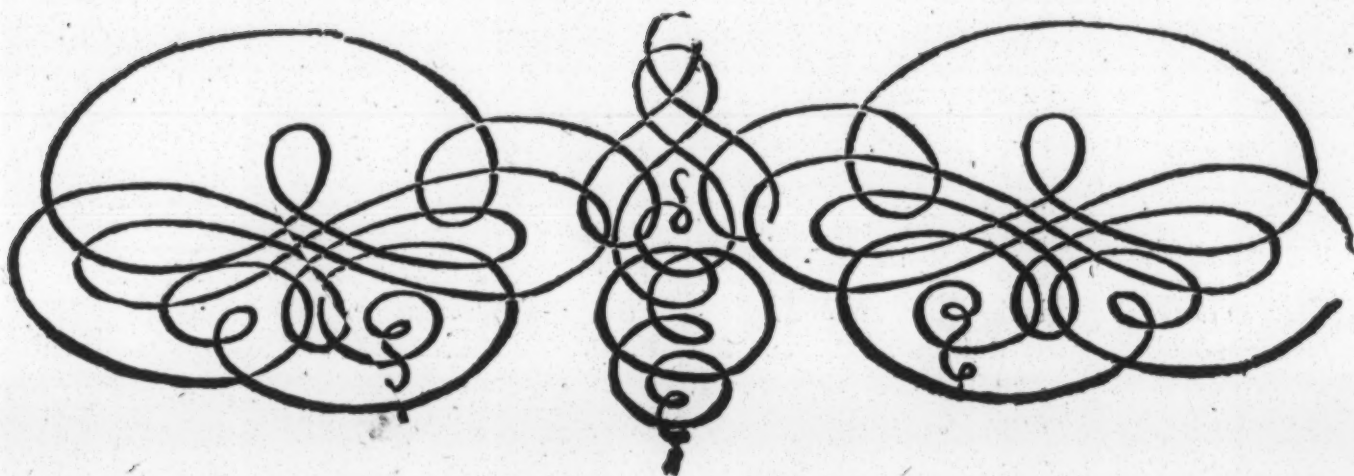
Here under is a great bay
a league long.

Dornebosch.

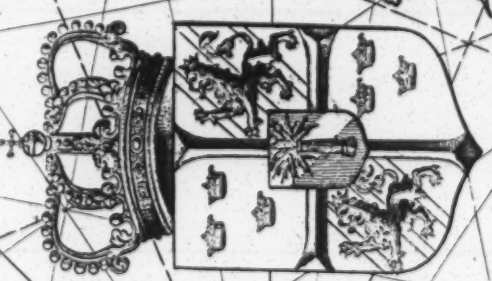
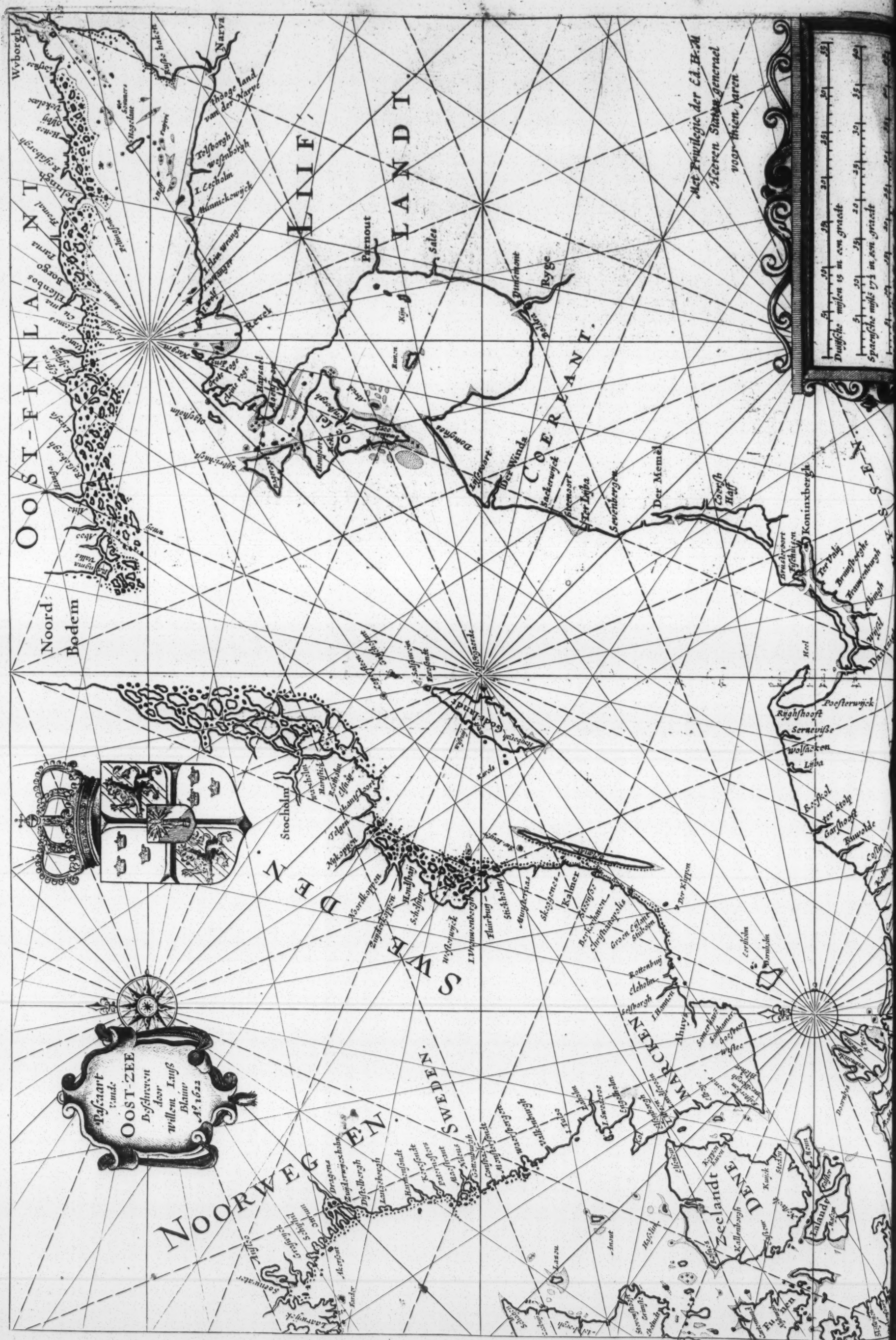


Thus sheweth themselves Witmondt and Dornebosch with the land betwixt them both, when it is about southsouthwest from you, so farre that you may but even see it from belowe.

The end of the second Booke.



The second part
T H I R D B O O K E
of the
S E A - B E A C O N
of the Easterne and Northerne
N A V I G A T I O N,
Containing
T H E D E S C R I P T I O N O F T H E
Seacoasts of Pomeran, Prussia, Coerland,
Liefland, and Sweden.
Lying upon the Easterne sea.



OOST-ZEE
vande
Oost-Zee
door
Willem Ians
Blauw
A. 1622

Met Privilegie der Ed. H. H.
Heeren Staten-Generael
voordien jaren



of the

EASTERNE AND NORTHERNE
NAVIGATION,Conteyning the Description of the Coasts on both sides of the East sea,
from Bronthollom and Statyn Eastwards unto Wyborch.

C H A P. I.

*Of the coast of Pomerland betwixt Statyn or the New-
Deepe and the Rosehead.*

HE New-deepe and Colberghen lie east and west 16 or 17 leagues asunder.

The haven of Colbergen you must saile into betweene two heads, until you come before the Towne. Within in the river, right over against the towne, lieth a Well or Brooke, which can give all the countrey there about salt, of water which they sethe, and yet the water of the river is fresh as Milke, for it is a little water that commeth out of the land. The coast of Pomerland lieth from Colberghen to Garshead northeast and by north, and southwest and by south about 13 leagues; betwixt them both lie two havens more, to wit, Coslyn and Ruwolde.

The haven of Coslyn lieth from Colbergen northeast 4 leagues distant. And from Coslyn to Ruwolde the course is northnortheast 5 leagues. Into the haven of Ruwolde, or the little river called the Wipper, an indifferent ship may go in. It is from Ruwolde to Garshead northnortheast 4 leagues.

The land lieth from Garshead to the Rose-head eastnortheast 19 or 20 leagues, betwixt them lie the havens of Stolp, Liba, and Sernevis.

A little to the eastwards of Garshead lieth the haven of the Stolp, which is a river so called as the towne, which runneth up to the same towne; onely for small ships, although that there doe indifferent great ships lade.

From Garshead unto Reefcoll it is all a white Strand, and lieth northeast and by east from it four leagues. Reefcoll is a high round hill verie good to be knowne, when you come off from Bronthollom. From Reefcoll to Liba it is 7 leagues.

Liba lieth upon a great river called the Offe. From Liba to Sernevis are five leagues, betwixt them lie the three Woolfacks, which are three black tuffes of trees, whereby this land is verie good to be knowne, a little to the eastwards of these three little hommocks lieth a long hill which doth shew it selfe (when you come out of the west) on the west end divided into three or foure little hommockes. Seven or eight leagues to the eastwards of the Woolfacks followeth the high land of Rose-head, which is verie steepe upon the water side. Betwixt the Rose-head and Reefcoll it is all a white strand, and most of the land growne with trees.

Sernevis is a little towne lying upon a little off water, which with a little river runneth into the sea, but within, it doth spread it selfe into a great river. It is from Sernevis to the Rose-head 4 leagues.

You may sound about the Rose-head, in 15 & 20 fathome, and also you may well anker under the Rosehead, there is better ground then under the Heel. All the strand of Pomerland is alongst the sea side above, all blacke with trees.

Of the depths and grounds about these places.

Betwixt Bronthollom & the coast of Pomerland, in the fare-way, when you can see Bronthollom it is 26 fathome deepe, but so farre to the southwards that you can

East. water. 3 Booke.

see the coast of Pomerland, there it is 7 and 8 fathome deepe, but without sight of the land 12 & 13 fathome deepe. Alongst all the coast of Pomerland betwixt the New-deepe and Rose-head, it is along by the coast 22, and 20, and also well 25 fathome deepe,

Betwixt Colberghen and Garshead it is all a flat even strand & ground, without any banckes. In the farewaie betwixt Bronthollom and Reefcoll, it is 27, and 28 fathome deepe, but farre to the northwards of it, it is at least 35 and 38 fathome deepe.

Northwest from Reefcoll 4 or 5 leagues from the land, lieth a bancke of 9, 10 & 11 fathome, when you come from Bronthollom, and Reefcoll commeth to bee southeast and by east from you, then you come against this bancke, & endeth when Reefcoll is south and by east from you.

From this foresaid bancke towards Bronthollom, it is 25, 30, and 36 fathome deepe, soft clay ground, but towards Reefcoll it is showlder.

If you cast the lead often, sailing alongst that coast, you shall finde more banckes.

You may boldly saile alongst this coast by night, or darke weather in eight, tenne, or twelve fathome off from Reefcoll untill about the Rose-head. Thwart of the Rose-head, it is farre flat, and ground as riffe ground. When you come past or about Rose-head, it is verie deepe.

When the Rose-head is southsouthwest from you about a league, there it is thirtie fathome deepe, but verie uneven and full of bancks, and the ground whitegrosse sand.

Rose-head being southeast from you, it is 28 fathome deepe, with reed stony ground, almost like as if it were riffe sand.

Rose-head being west from you, there it is 16 fathome deepe, and white sand ground.

Courses and Distances.

From the Newdeepe to Colberghen the course is east, and east and by north 16 or 17 leagues.
From Camyn to Colberghen n. e. and by e. 4 leagues.
From Colberghen to Coslyn northeast 4 leagues.
From Coslyn to Ruwolde n. e. & by n. 5 leagues.
From Ruwolde to Garshead northeast and by north 4 leagues.
From Garshead to Reefcoll northeast and by east 4 leagues.
From Reefcoll to Liba eastnortheast 7 leagues.
From Liba to Sernevis eastnortheast 5 leagues.
From Sernevis to the Rose-head the course is eastnortheast 4 leagues.
From Colsbergen to Garshead northeast and by north 13 leagues.
From Reefcoll to Rose-head the course eastnortheast 16 leagues.
From the South end of Bronthollom to the Swin south 13 leagues.
From the south end of Bronthollom to Colberghen south-east 16 leagues.
From the south end of Bronthollom to Reefcoll the course is east, and east and by south 24 leagues.
From the south end of Bronthollom to the Eartholloms north 4 great leagues.

1	2	3	4	5	6	7	8	9	10				
Duytsche mijlen 15 in een Graad													
1	2	3	4	5	6	7	8	9	10	11	12		
Spaanfche mijlen 17½ in een Graad													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Engelf. en Frans. mijlen 20 in een Graad													

De Zeeuyfen van Po-
meren tufchen het Swin
en Rijghooft.

CASSVIBEN

Lyba

Wolfacen

Sernvijfe

Rijghooft

Reefcol

Ter Stulp

Gafthooft

Rauolde

de Wipper

Coglin

Dolbergen

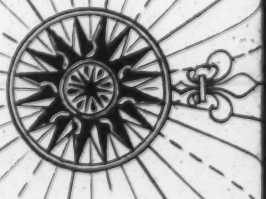
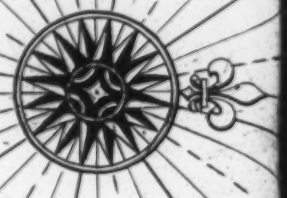
Southorn

Canin

Brouwers Riff

Bornholm

Eckholm



From the north end of Bronthollom, or from the Earthholloms to Rose-head the course is east, and east and by south 40 leagues.

How most of the chiefe points and places of the east sea lie distant from Bronthollom.

From Bronthollom to Der Memell east and by north 65 or 66 leagues.

From Bronthollom to Der Lyba eastnortheast 67 or 68 leagues.

From Bronthollom to Derwinda northeast & by east 80 leagues.

From Bronthollom to Eastergore northeast or somewhat northerly 63 or 64 leagues.

From Bronthollom to Houbrough, or the south end of

Gotland n. e. somewhat northerly 50 leagues.

From the north end of Bronthollom to Southernorden the South end of Oeland northeast and by north 25 leagues.

From the south end of Bronthollom to Southernorden northnortheast 27 leagues.

From Bronthollom to the Rockes n. e. 19 leagues.

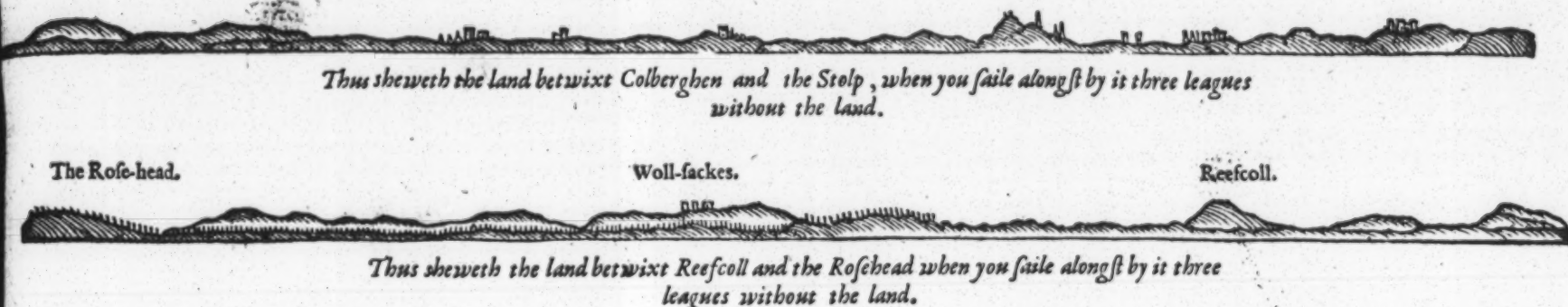
From Bronthollom to Hanno the course north and by west 12 leagues.

From the north end of Bronthollom to Santhamer northwest 5 leagues.

From the north end of Bronthollom to the point of Goefbeer westnorthwest 5 leagues.

From the north point of Bronthollom to Wtsteede west and by north 8 leagues.

How these Lands doe shew themselves at sea.



CHAP. II.

For to saile from the Rosehead to Danske, Quinsbrough, Melven, and Der Memell.



From the Rose-head to the Heele, the course is southeast eight or nine leagues distant. When you come neere the Heele, you are almost ground off in thirtie fathome. On the coast of the Heele close by the land, it is four and twentie and also thirtie fathome deepe.

Vnder the Heele you may ancker in 16 and 20 fathome close by the land, the ground there goeth off verie much. If you be a little off from the land, then you are ground off, not verie farre without the land you have no ground in 40 fathome. A league to the northwards of the Heele there runneth off a flat from the land, whereof you must take heed, when you will go to ancker under the Heele, you may ancker on both sides of the Heele, but on the inner side it is soft ground.

From the Heele to Danske before the Wissell, the course is south and by west 5 leagues. If you will ancker before the Wissell, then ancker to the westwards of the Chests, or the Westerhead in 10 or 12 fathome.

But for to saile into the Wissell, or the Danske Deepe, you must looke for the 2 masts with barrells upon them, which stand upon the Chests, or the Westerhead, bring them one in the other, and saile in right with them, in betwixt the Chests, but when you are within Termundt, you must choose the easter shore, for the West shore is flat, when you come before Boatmans flat, you must choose the side of the Green-shore, and make there fast with foure hawfers or cables.

The Quinsbrough deep lieth from the Wissell, or the Chests of Danske eastnortheast, and northeast and by east 13 leagues. From the Rose-head east and by south 17 or 18 leagues, and from the Heele east and west 13 leagues.

From the Wissell to the Quinsbrough deepe and all alongst to the northwards of it, is altogether a faire white sandy strand, upon both sides of the deepe stand some withered trees, to see to as if they were burnt, but upon the south side stand two Capes, or beakons. If you will saile in there, bring the capes one in the other, when you come in 10 or 8 fathome, and saile in so right with them, and so you shall run right with the buyes, which lie on both sides

of the Deepe to 8 or 10 in number, to wit, on each side foure or five, saile in betwixt them, untill you come within in the Ketell. There is no certainty to be written of the lying in of this channell, as also of the Danske deep, whereunto men might trust, for by reason of the scouring of the Freshuts, & with great streaming of the Ice, they doe change oftentimes, and sometimes in short time, but the Lords of the land there have verie great care to give charge that they be alwaies well set with buyes and beakons.

For to ancker in the road without the deepe, then ancker so that the point of Locksteed lie about north and by east from you, there it is eight, nine and ten fathome deepe.

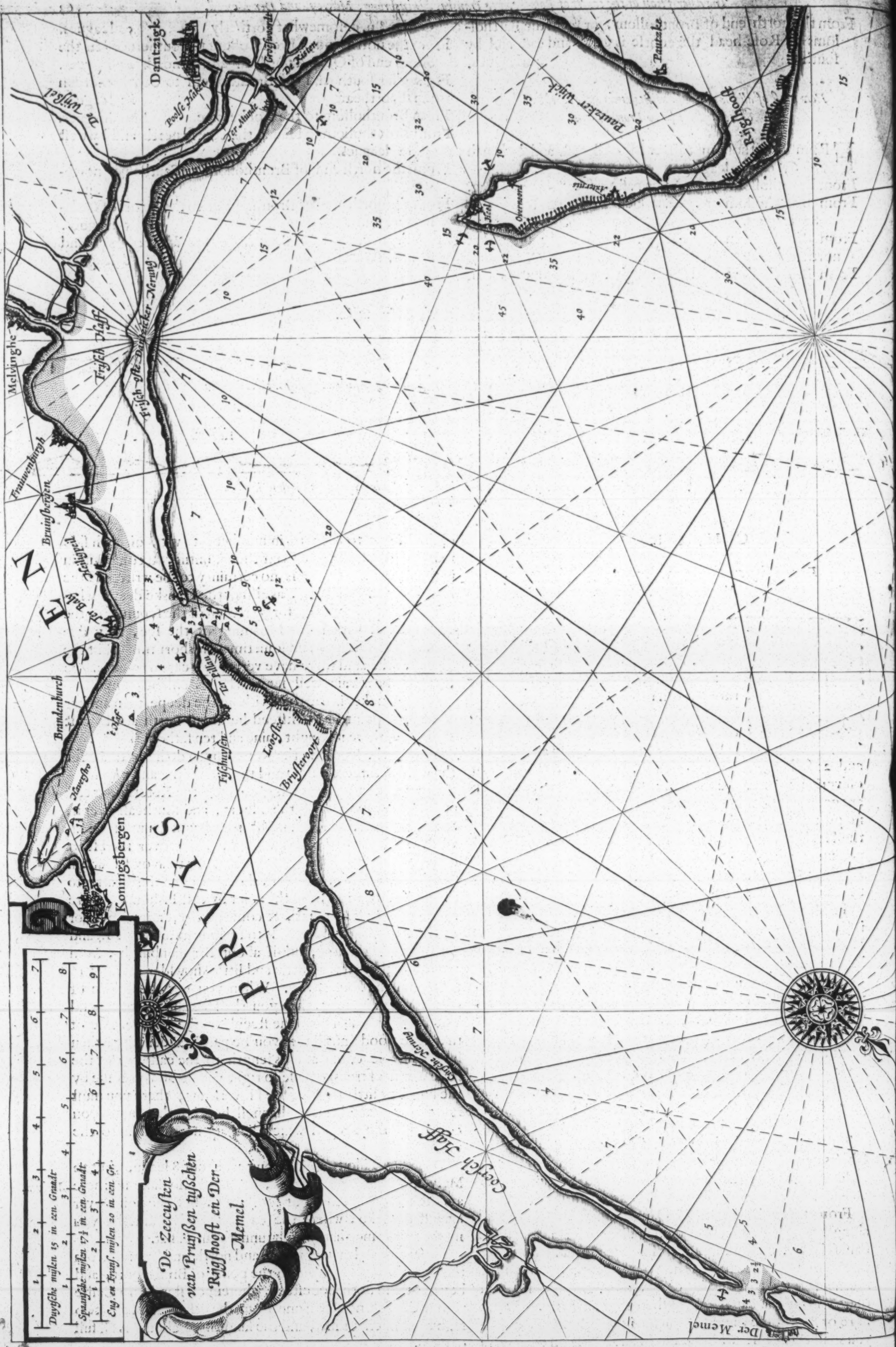
Within the Deepe in the Ketell, men do lie to tararie for the wind in three fathome and three fathome and a halfe.

For to saile up the Haff go out of the Ketel about east untill you come against the Heert, and southeast over it, & then alongst the Haff amidst the channell unto the Haverstrom, the course is most east. Being over the Heert edge somewhat to the south shoare, for to avoyd that riff which lieth off from the north shoare about a third part into the Haff, to wit, from the point by east Fishouses, there lieth a little buye upon it, & come no neerer it then 12 or 13 foot. The right fareway is to the southwards of it 14 and 15 foot soft ground, untill about Brandenburg, from thence further it is by little and little shoulder 12, 11, & 10 foot upon the Haverstraw. When you get the steeple of Quinsbrough in sight, then you shall see also by it, a round black little wood; keepe the steeple on the n. or e. side of that little wood, untill that you be past Brandenburg, then let the steeple come a ships length to the eastward of the little wood of trees, & saile so right with it, till you come by the buyes or little trees of the Haverstraw, there you must run through amidst the channell betwixt them untill you come into the Pregell which lieth up northeast unto the towne.

From Der Pillo to Quinsbrough are about 8 leagues, but to Melven it is about 9 leagues, you must also saile up there amidst the channell about southwest, but the point over against the Pillo, where the castle Terbaly standeth, you must avoid somewhat, which runneth far off flat.

Four or five leagues north and north and by west from the Quinsbrough Deep lieth the point of Brusteroot, and betwixt them both Loocsteed, whereupon standeth a Castle with a Church not farre one from the other, and also two high hommocks or hils, and the land there abouts is all full of trees.

From



1 2 3 4 5 6 7
Duyfche mijlen 15 in een Graadt
1 2 3 4 5 6 7 8
Spanfche mijlen 17½ in een Graadt
1 2 3 4 5 6 7 8 9
Eig en kruis mijlen 20 in een Gr.

De Zeeuften
van Pruißen tusschen
Riga'shoof en Der
Memel.

From Brufteroort to the Deepe of Der Memell, the course is northnortheast 16 or 17 leagues. It is there betwixt them both a faire strand, and the land lieth in a great Bay. The Deepe of Der Memell lieth in northeast, and northeast and by east, and is two fathome deepe, within it you come into a great Haffe: you may runne to the westwards about the point, and ancker there where you will.

Of the depths and grounds about these coasts.

Betwixt the Heele and the Rose-head, but neereft the Heele, there it is 33 fathome deepe, and the ground is there white sand.

At the Heele in the road it is 25 fathome deepe, the ground blacke sand, and going off to 30 and 40 fathome.

Betwixt the Heele and Quinsbrough it is verie deepe, comming neere the Heele it is steepe, but towards Quinsbrough and the Nerung it goeth up plainly flat.

How these foresaid lands doe lie one from the other, and from other lands

From the Rose-head to Axternes southeast 4 leagues.
From Axternes to Vernorden southeast 1 league.
From Vernorden to the Heele s. f. e. 1 league.
From the Heele to Danske south and by w. 5 leagues.
From the Chests or Wiffell of Danske to the Deepe of Quinsbrough e. n. e. & n. e. & by east 13 leagues.

How these lands doe shew themselves at sea.

Vernoorde.

Axternes.

Hannekeheers.

Loockstede

Rose-head

Thus sheweth the land betwixt the Rose-head and the Heele.

Thus sheweth the land betwixt Quinsbrough deepe and Brufteroort.

C H A P. III.

Of the coast of Coerland betwixt Dermemell and Derwinda.

From Dermemell to Heyligena the coast lieth north and by west 4 leagues.

From Heyligena to the point of Sevenberghen, northnorthwest 5 leagues, that is with hommocks and hilly land.

Foure or five leagues north, and north and by east from Sevenberghen lieth Terlyba. There goeth into the land a

little river, but there can goe in no shipp, there is no more then 6 foot water. On the north side of the river standeth a Gentelmans house or Castle, with a turret upon the middst of it, the north end of the house is covered with boards, and the south end with reede tyles, to the southwards or to the eastwards of it stand also some houses, covered also with tyles, in betwixt two woods to see to. If you will ancker in the road of Terlyba, then ancker a little to the southwards of the village, so that the foresaid Gentelmans house with the turret doe stand east and by north from you in foure fathome and a half, and 5 fathome lesse then two foot, there is the best road & ground that is thereabouts. When you come out of the sea, and fall with the land to the eastwards or to the northwards of Terlyba, you shall see within the land a blacke wood, and the houses in a ragged valley of Sand-hills. From Terlyba to Derwinda the course is north and by east 16 or 17 leagues, betwixt them both the land lieth in a bight, so that the coast alongt by the shoare lieth not so right, especially, 4 or 5 leagues by south Derwinda, there it falleth away into a great bight, which men do call Sackerwyke, and also with more smaller bights and bayes towards Terlyba.

About 4 leagues to the northwardes of Terlyba lieth a point called Stickeroot or Steenoort, thwart thereof it is verie flat, so that a good waies from the land, it is not deeper then nine, tenne, and twelve fathome, all stony uneven ground, of this point you must take good heed, and not

East. water. 3 booke.

From the Deepe of Quinsbrough to the point of Brufteroort north & north & by west 4 or 5 leagues.
From Brufteroort to the Deepe of Dermemell north northeast 16 or 17 leagues.
From the Rose-head to Quinsbrough deepe east and by south 17 leagues.
From the Heele to Quinsbrough Deepe east 13 leagues.
From the Rose-head to Der Memell northeast and by east 29 leagues.
From the Rose-head to Sevenberghen northeast 33 leag.
From the Rosehead to Derwinda northeast and by north 53 leagues.
From the Rose-head to Dagerorte northnortheast 80 leag.
From the Rose-head to Ealstergore, north somewhat easterly 45 leagues.
From the Rose-head to Houbrough the south end of Gotland north somewhat westerly 34 leagues.
From the Rose-head to the south end of Oeland northwest 33 leagues.
From the Rose-head to Hannoe the course is west and by north somewhat northerly 38 or 40 leagues.
From the Quinsbrough Deepe to Houbrough the south end of Gotland n. w. and by n. 48 leagues.
From the Quinsbrough deepe to Southernorden, the south end of Oeland; northwest and by west and westnorthwest 50 leagues.
From Dermemell to Houbrough w. n. w. 37 leagues.

come too neere it. Anno 1599 in the Spring a man of Hoorn failed somewhat neere to this showld, and came on ground upon an unknowne rocke, and lost his ship. To the northwards of it, towards Derwinda, thwart of Sackerwyke it is all cleane ground, and farre flat, at many places a good waies from the land not deeper then 6 and 7 fathome clean sandy ground, good for to ancker in, when you lie by there with a northeast wind, & can get nothing with turning to windwards, but if you keepe under saile, you may in turning to windwards come neere the shoare everie where without feare in 4 or 5 fathome.

For to know this coast of Coerland, then remember these places here under written.

At Derwinda standeth a Castle with three Towers, which is covered above with reed tyles, and under it is white, about a league to the southwards of Derwinda, lieth the Backeovens, which is next to Domesnes, the best land to be knowne of Coerland, it ariseth first when you beginne to see the land, in a white Sandhill, the top whereof is full of trees, but when you come so neer the shoare, that you can see the other land also, then there ariseth more land with hommocks, so that then it is not so good to be knowne.

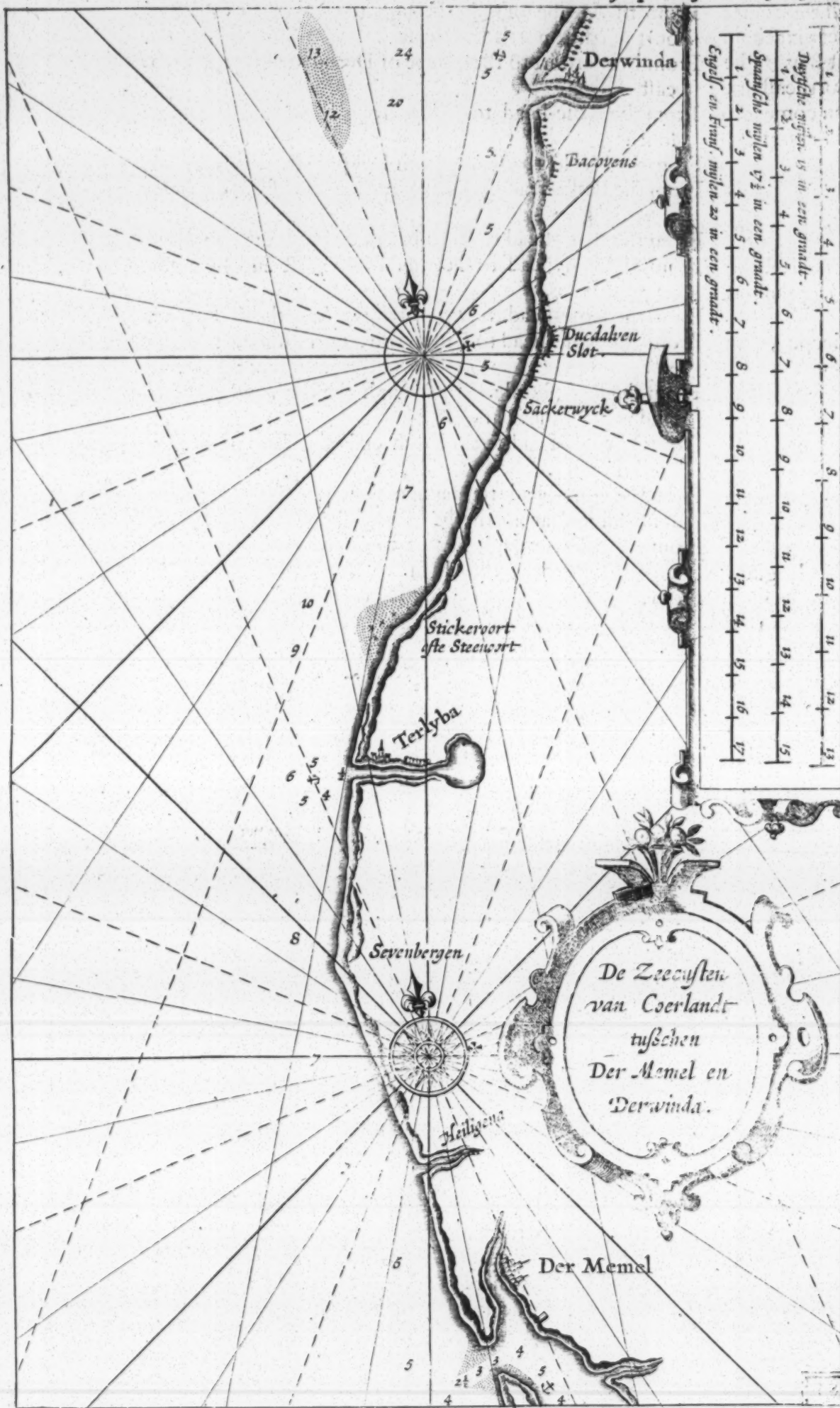
About foure leagues to the southwards of it in Sackerwyke lieth yet a hommock or hill full of trees with some little hommocks to the eastwardes of it when you are thwart of Derwinda, you may even see it half waies up to the top, but not well from below. This hommocke is called by some Duke d'Alvas Castle and lieth most alone: the land, as well to the southwards as to the northwards of it, is most all even and plaine land.

About six leagues to the southwards of the foresaid hommock, and 5 or 4 leagues and halfe to the northwards of Ter Lyba, lie also two high hommocks close one by the other, the land to the southwards of them towards Ter Liba, is to see to a farre of, (when you are thwart of these two hommocks, or somewhat to the northwards of them) as if it were all broken land, thwart of this about 5 leagues from the land, or when you can but even see the land from below, it is 30 fathome deepe.

For to knowne Coerland.

Backeovens.

Duke de Alvas Castle.



When you begin to come about Derwindt within 2 or 3 leagues of the land, there lieth a banck of 12 13 & 14 fathome: some say that west and by north from Derwindt, there should be no more upon that bancke then 5 or 6 fathom water, it is about a halfe league broad, betwixt the banck & the land a league without the shoare, it is againe 20 & 24 fathome deepe.

If you will ancker before Derwindt, then bring that foresaid Castle about e. f. e. from you, then it commeth almost behind the high land, and ancker in 5 fathome from the shoare, there is the best road.

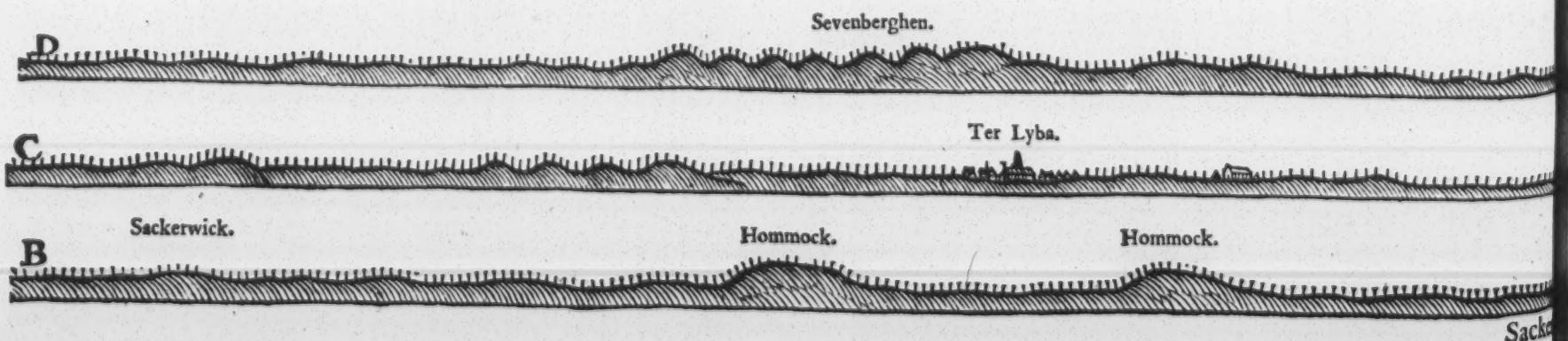
How these places lie one from the other, and from other lands.

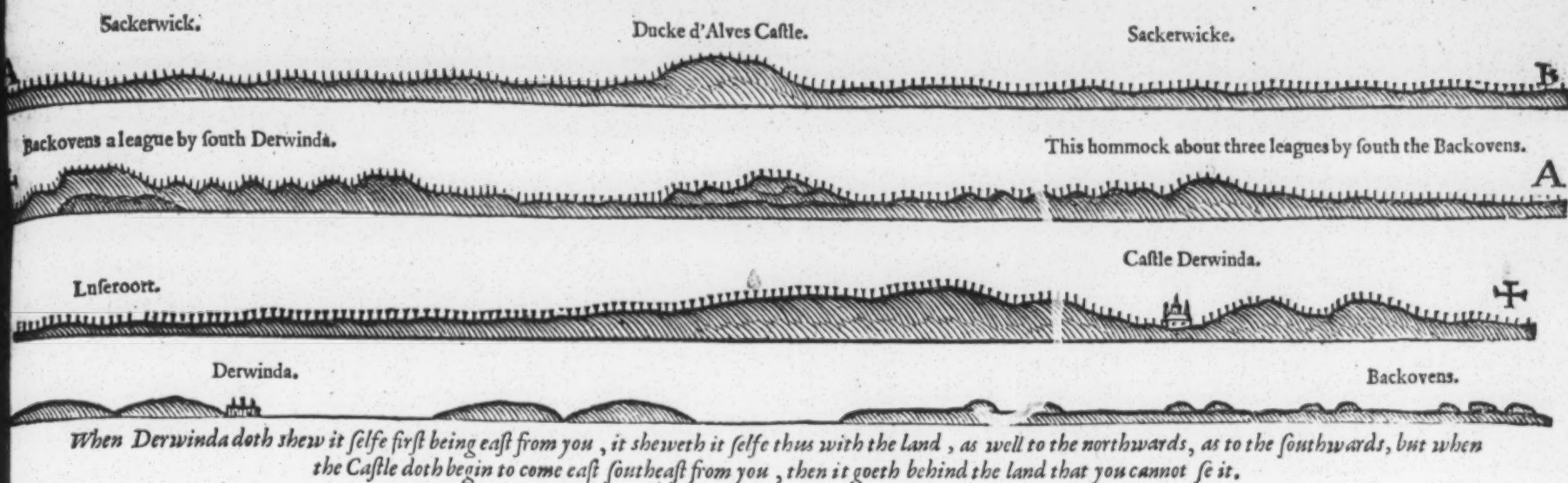
From Der Memell to Heylighena north and by west 4 leagues.
 From Heylighena to the point of Sevenbergen northwest 5 leagues.
 From Sevenbergen to Der Lyba north and north and by east 4 or 5 leagues.
 From Der Lyba to Derwindt north and by east 16 or 17 leagues.
 From Der Memell to Brufteroort south-southwest 16 or 17 leagues.
 From Der Memell to Danske southwest and by south 32 leagues.
 From Der Memell to the Rosehead southwest & bywest 29 leagues.
 From Der Memell to the Eartholloms, or the north end of Bronthollom, west and by south 64 or 65 leagues.
 From Der Memell to Houbrough west northwest 37 leagues.
 From Sevenbergen to the Rosehead southwest 33 leagues.
 From Sevenbergen to Southerorden west southerly 48 leagues.
 From Derwindt to the Rose-head southwest and by south 53 leagues.
 From Derwindt to Bronthollom southwest and by west 80 leagues.
 From Derwindt to Houbrough west and by south 37 leagues.
 From Derwindt to Eastergore the course is west 29 leagues.
 From Derwindt to the Godtsche land northwest and by west 31 or 32 leagues.
 From Derwindt to Dageroort north and by west somewhat westerly 33 leagues.

How these Lands doe shew themselves at sea.

Thus sheweth it selfe the coast of Coerlandt about Sevenbergen when you saile alongst by it a league without the land.

The coast of Coerlandt from Sevenbergen alongst by Derwindt unto Luferoort sheweth as is portrayed in these sixe figures following, the like markes belong one to the other, as AA, BB, CC, DD, &c.





C H A P. I V.

How men shall saile from Derwinda about Domesnes to Rye.

TH E lying of Derwinda, & how men shall know it, is declared in the former chapter.

From Derwinda to Lyserorte the coast lieth northeast and by north four leagues: and from Lyserorte to Domesnes eastnortheast twelve or thirteene leagues. When you are thwart of Lyserorte, you can perceive no point, it seemeth to be all an even right coast from Derwinda to Domesnes, but coming from Derwinda or from Domesnes, and being a league or two to the eastwards of it, you can see wel that it is a blunt point lying out. Thwart of Lyserorte runneth of a great uneven shold, at least two leagues into sea, but you need not fear of it, you may runne over it in four, five, or six fathome by the lead, like as also alongst all the coast of Coerland from Derwinda, untill about Domesnes.

To the westwards of Lyserorte the land hath a little bight, there you may ancker for northeast, eastnortheast and east winds: when it bloweth hard, & that you can do no good with turning to windwardes, you must bring the point of Lyserorte e. n. e. from you in seven fathome, there is cleane sand ground and good lying.

The land betwixt Domesnes and Derwinda is verie good to be knowne. At the point of Derwinda it is high, & goeth sloping downe by little & little to the eastwards unto Lyserorte; Likewise 3 or 4 leag, by west Domesnes lieth a high blew hill, called the Doembergh, which is steep on the east side, and goeth by little and little sloping downe to the westwardes neare unto Lyserorte, so that there two high double blew lands do goe downe into a valley one against the other, the low land betwixt both is Lyserorte. The point of Domesnes it self is low sandie land, & lieth out about 3 leagues to the eastwards of the foresaid Doembergh: but all that land is altogether full of trees.

The south end of Oesell lieth from the point of Domesnes northwest and by west about four leagues asunder, there runneth of a great Riffe, about south and by west, and southsouthwest into sea, towards the shold of Lyserorte, called Swalverorte, that is a dangerous riffe, at least three leagues long, verie hard and uneven, at some places towards Oesell it lieth drie above water and at some other places it is two, two and an half & three fathome deepe. To the westwards of that riffe lie also manie uneven Dwaelgrounds a good waies off from the land, which lie alongst the coast of Oesell to the northwards which are at some places not deeper then two, three and four fathome.

If you will goe to Rye, and coming out of the sea doe fall with the land about Derwinda, then leave not the coast of Coerland, but runne about by it upon the lead, all alongst unto Domesnes in four, five, six, or seven fathome, according as you have the wind, that you may not fall without, or to the westwardes of that riffe Swalverorte. The channell betwixt Coerland & that foresaid riffe is fourteene, fifteene,

and sixteene fathome, but verie uneven. The ground upon the shold thwart of Lyserorte is at some places also very uneven for to sound, sometimes fixe, sometimes eight, and nine fathome, the one east at least two or three fathome more or lesse then the other, and that not verie farre from the land, but you need not feare of it, you may bouldly run to the shoare in 4 & 5 fathome.

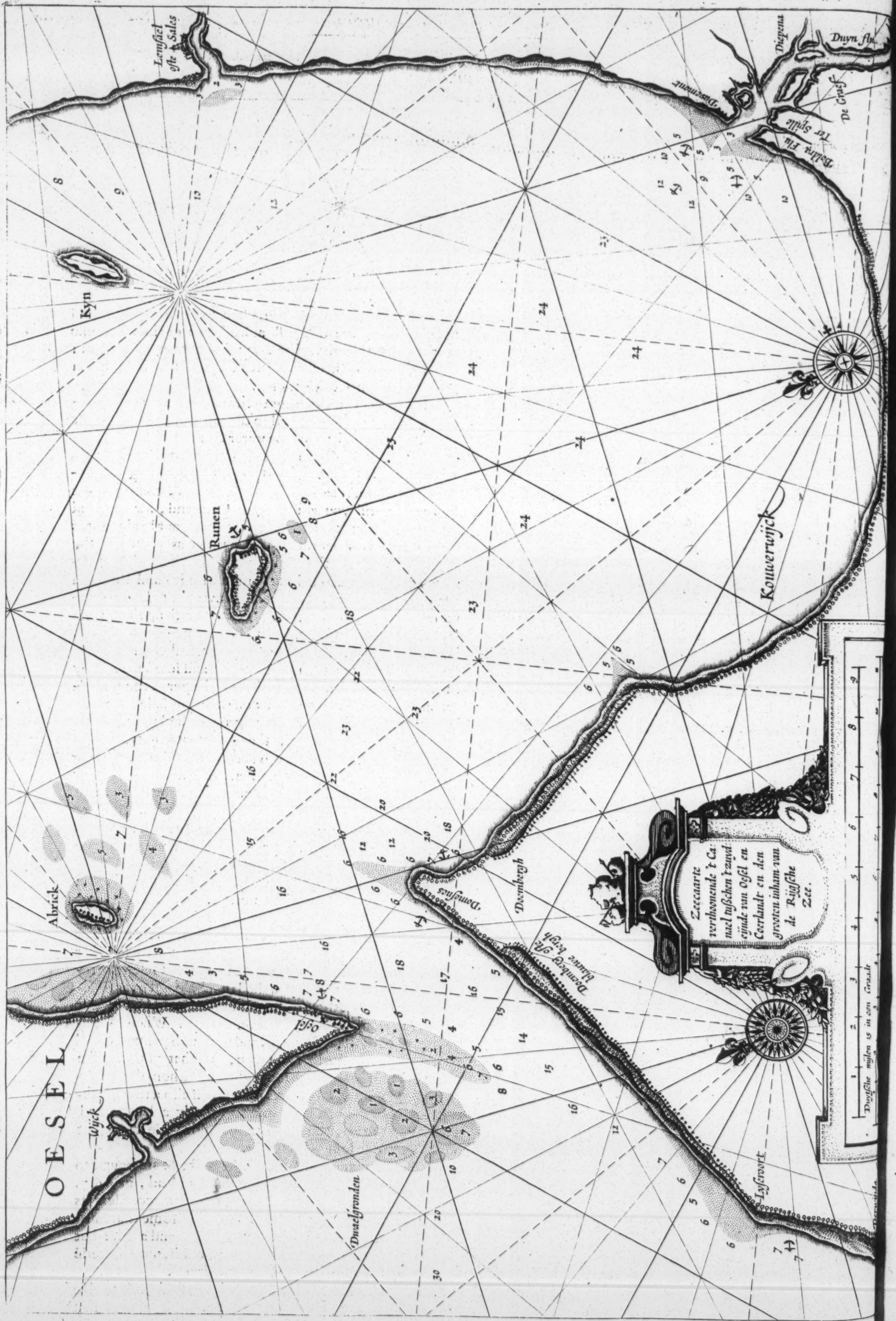
But if (when you come out of the sea) you are past Lyserorte, & come with the land to the northwards of it against Oesell, then you have deepe water, for not far to the westwards without Swalverorte it is 30 fathome deepe. If you can see Oesell and Coerland, and that the Doembergh be eastsoutheast, or southeast and by east from you, then runne on southeast untill you come neare Coerland, for to avoid Swalverorte, and then alongst by it upon your lead towards Domesnes, as is before said. Or when as you have the Doembergh eastsoutheast from you, then keepe it so standing from you, and saile in so right with it, and then you shall (without hurt) runne alongst over the taile or outermost shold of Swalverorte, it sholdeth up there verie soone and sodenly from thirtie to fifteene and nine fathome, but if you bring the east side of the Doembergh not more southerlie from you then eastsoutheast and southeast and by east, then you shall not meet with any danger of the Dwaelgrounds, nor of Swalverorte, you shall thus saile alongst at least three leagues over the Dwaelgrounds and Swalverorte, over verie uneven grounds, the one east at least twelve the other nine, and also well seven, and fixe fathome, but goe on your course without feare, when as the Inner side, or east side of the south end of Oesell commeth to be north, and north and by east from you, then you are over the riffe, & within all the foule groundes that might hurt you, when as that you get then thirteene or fourteen fathome then saile bouldly without fear towards Domesnes.

If it should happen, that with a northwest wind, you should fall with the land to the northwards of Derwinda or Lyserorte, & should feare to come neere the coast of Coerland, then keep not further of to sea, then that the east point of Doembergh be eastsoutheast from you, when that you bring the east side of the south point of Oesell northnortheast from you, then you shall runne alongst over Swalverorte in seven fathome. Betwixt Oesell and Coerland it is sixteene and seventeene fathome deepe. When as Domesnes is southeast and by east, and the south point of Oesell northwest & by north from you, and that you are alike neare to them both; there it is eighteene fathom deepe.

From the point of Domesnes runneth off also a riffe northeast & by north, or a little more northerly a league and a halfe into the sea, which is on the east side verie steepe, but on the west side somewhat flatter.

When you come from out of the west, & are bound to Rye, you may runne about by it upon your lead, in 5, 6, 7, 8, 9, & 10 fathome, so neare as you will, but according as the wind and wheather shall be. I know of some that have founded about it in four, and four fathome and a half: but he that will runne so somewhat neare about it, must be verie carefull in using of his lead, and not let it rest.

Not verie farre from the riffe, on the westside, it is twelve



OESSEL

Wyck

Abrick

Runen

Kyn

Lemsaal
ofte Sales

Kouwerwijk

Duijn

Duijn

De Groot

De Groot

De Groot

De Groot

De Groot

De Groot

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De Groot

De Groot

Zeevaarte
verhoonende t Ca
nael nyschen t zuyd
eijnde van Oesel en
Soerlandt en den
grooten inham van
de Rijsche Zee.

Duytsche mijlen 15 in een Graad

and thirteene fathome deepe. When as the point of Domesnes, where the withered trees stand upon, come to be southsouthwest from you, then you come on against the west side of the riffe, when that point is southwest & by south from you, then you are right thwart of the point, but when it is f. w. & f. w. & by west from you, then you are about the riffe, and then you may bouldly goe on f. e. towards Rie. Domesnes & the Deepe of Rye lie f. e. somewhat southerly, & n. w. somewhat northerly, one and twentie leagues distant.

About eight leagues to the eastwardes or the southwardes of Domesnes runneth of another riffe from a point, which you may sound about in five & six fathome. The land betwixt Domesnes & that point lieth about southsoutheast and northnorthwest but to the southwardes of it, it falleth away to the south, so that betwixt this point, and the Deepe of Rye, there is a great bay, which is called the Kowerwyck: somewhat to the southwardes of this point in the bay, lieth some high land, which lieth from the Deepe of Rye w. & by f. & e. & by n. It must be verie cleare weather when you can see it, lying at ancker before the Deepe of Rye. When as (comming from Rye) you shall be somewhat to the southwardes in the Kowerwyck, and come running out there by the shoare, this foresaid point hath thus oftentimes been mistaken for Domesnes, because that then you can see no land without it, but when as you come about the point, you shall againe see the land out a head, then you are yet about eight leagues from Domesnes.

Vnder the point of Domesnes you may ancker on both sides, as well to the westwardes as to the eastwardes. If you wil ancker to the westwardes of it, then ancker in fixe, seven or eight fathome, there you have good sand ground, and sheltered for east and southeast windes. If you wil ancker to the eastwardes of it, then ancker in fixe or seven fathome, a little within the point of the Iland, so that the point be north, or north and by west from you, there is good sandie ground, & good lying for a southsouthwest, west, northwest, & northnorthwest wind: the point of the riffe lieth then from you about northnortheast a league and a halfe. If you will ancker further from the shoare, so that the point of Domesnes be northwest, or northwest & by north from you, there it is 18 and 20 fathome deepe & soft ground.

If that comming off from Rye against the Riff of Domesnes, you wil sail about it, then you must runne farre enough about without it, or if you will take it somewhat neare, you must be exceeding carefull in using your lead. It is (as hath bene said) verie steepe on the east side, with a northwest waie, (which runneth thwart into the riffe) you shall have the one cast twelve, nine, or eight, and the next cast four, or three fathome, if you fall within the point of the riffe. But if you have been at ancker under Domesnes, and set saile from thence, and will saile about the riffe, then you may the better runne about it by your lead. Goe from thence, n. n. e. and northeast and by north, that runneth most alongst by the riffe. When the point of Nesse commeth about west from you, then it will be by little and little somewhat shoulde, you may sound about it so in five, fixe or seven fathome, then you must not spare your lead, but must sound often. With a northwest course come not nearer it then in 9, 10 or 12 fathome. When the point of Nesse commeth to be southwest from you, then you come to the east side of the riffe, when that is f. w. & by f. from you, then you are right thwart of the point off the riffe, but when it is f. f. w. from you, then you are about the riffe, go then westsouthwest, or more southerly towards Coerland, and runne alongst by it, in five, fixe, or seven fathome, (according as the winde shall be) toward Lyserorte.

If you saile from Rye with an east or northeast wind, and shall saile by night about the riff, then set your course so, that you be sure you runne farre enough alongst to the northwardes, or without the Riffe, and keepe that course untill that you come neare the grounds Ambroeck or Oesell in fifteen or sixteene fathome, then you shall be without doubt past the riffe, then goe on a while southwest, untill that you reckon the point of Domesnes to be southeast, or

somewhat more easterly from you, then edge up to the coast of Coerland by your lead, and runne alongst by it, in four, five, fixe or seven fathome, as hath bene before said.

East and by north eight leagues from Domesnes lieth the Iland Round: you may run round about it by your lead, in fixe or seven fathome. All alongst the southwest side it is all foule, and sharp rockie ground, therefore come not nearer the shoare there, then in six fathome. Southsoutheast about a halfe league from the south point lieth a little plat, where upon it is not deeper then six foot, there hath once a man bene beaten off his ruther. It lieth betwixt the 7 and 8 fathome depth, for to avoid that, take there abouts the sounding of the shoare in five or fixe fathome, and then you runne through betwixt it and the shoare, or els, if you keepe in 8 or 9 fathome, then you runne about without it.

If you will ancker under Round for a southsouthwest, southwest of westsouthwest wind: then runne about the southeast point, untill you come to the east side, there is a little bay, where stand a few houses with a chappell, which you can see when you come somewhat neare to the shoare, ancker thwart of it in five fathome, so that the chappel doe stand f. w. from you, there is the best road under Round, being cleane sandy ground, but when it bloweth hard the sea commeth rouling in. At other places it is not verie cleane.

The farewaie betwixt Round and Domesnes is two & twentie and three & twentie fathome deepe, and betwixt Round and Duynemondt three and twentie and 24 fathome.

From Round to the Deepe of Rye it is southsoutheast, & southeast and by south 16 leagues. Before the Deepe of the river Duyn you may ancker in tenne fathome, either to the southwardes or the northwardes of it, where you please.

The Deepe of the river of Rye is Pilots water, aswell in sailing up, as sailing off. How men shall saile there in or out it is not possible to describe, so that men might rely upon it: for by reason of the continuall scowring of the stream, and especially by some extraordinarie great freshuts, and strong drifts of yce the depths and showldes do there often shift and change, whereof everie one that is bound thither may be mindfull of.

From the Deepe of Rye to Parno the course is north and by east and northnortheast one and twentie leagues, betwixt them both, about twelve leagues from Rye lieth a little towne called Lemsael or Sales, there goeth in a little deepe of eight foot water. Before that Deepe lieth a banck, which you may saile about on both sides, and come within it, there it is three fathome deepe. The Iland Kinne lieth from Sales northwest five great leagues: from Round eastnortheast nine leagues, and from the Deepe of Rye north and by east about 14 leagues. It is a little low Iland, about three leagues long, & hath round about it most foule ground. Betwixt Kinne & the coast of Lyfland it is 4 leagues broad, and the right deepe betwixt them both is eight and nine fathome deepe.

Northwest & by west eight leagues from Round, and north seven leagues from Domesnes lyeth Ambroeck, that is a little Iland, which is round about foul, with sharpe stone ground, and lieth a great league distant from the coast of Oesell. Betwixt Round and Ambroeck, but nearest Ambroeck lie manie uneven Dwaelgrounds, of three, four, and 5 fathome. Ambroeck and the south end of Oesell lie e. n. e. somewhat northerly, and w. f. w. somewhat southerly about 7 leagues distant. Vnder the south point of Oesell on the eastside is a good road for westerly windes. If you will ancker there, then ancker in eight or seven fathome, so that the white church, which standeth somewhat within the southermost point, doe stand west and by south from you, there is good soft clay ground, and you shall lie sheltred for a west, and westsouthwest wind. The ground is there verie even and flatte, when as you get the seven fathome, and saile towards the land, it continueth long all one depth of 7 fathome, untill you come verie close by the shoare before it will shoulde.

It is there all alongst by the east coast of Oesell flatte ground of three, four, and five fathome.

For to saile from the south end of Oesell unto Arentbergh through within Ambrooke, you must leave two third

of the water on the larboard side towards Oesell, and one third part on the starboard side towards Ambroocke, there you shall have about seven fathome water and soft clay ground. Towards the coast of Oesell it is full of uneven Dwalegroundes; alongst by the west side of Ambroock you cannot lightly take hurt.

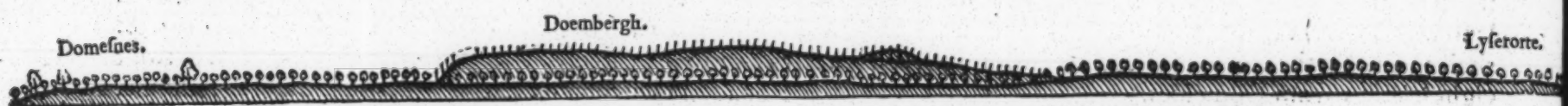
Arentsbergh lieth from the south end of Oesell northeast distant tenne leagues, but from the Iland Ambroock northwest four or five leagues. Vpon the west side of Oesell the coast lieth off from the south end unto Hondsorte, with diuers bayes, about northnorthwest & southsoutheast sixteen leagues, betwixt them both lie two lade places, Wyke and Reeck. Alongst this west coast of Oesell lie verie manie uneven and foul grounds, whereof men must take verie good heed.

How these lands doe lie one from the other, and from other lands.

From Derwinda to Lyserorte northeast and by north 4 leagues.
From Lyserorte to Domesnes eastnortheast 12 or 13 leag.

From Domesnes to Round east & by north 8 leagues.
From Round to Duynemondt or the mouth of the river of Rye southsoutheast, wel so eastly 16 leagues.
From Domesnes to Rye or Duynemondt southeast 21 l.
From Duynemondt to Lemsacl or Sales northnortheast 12 leagues.
From Duynemondt, or the mouth of the river of Rye to the Iland Kinne north 13 or 14 leagues.
From Round to the Iland Kinne east and by north 10 leag.
From Domesnes to the south end, or the road of Oesell northwest wel so westerly 3 great leagues.
From Domesnes to Ambroock northnortheast 5 leagues.
From Round to Ambroock northwest and by north 8 leag.
From the south end of Oesell to Arentsbergh eastnortheast 10 leagues.
From Lyserorte to Howbrough west and by south southerly 40 leagues.
From Lyserorte to the point of Alandt or the Ilands north-northwest 59 leagues.
From the south point of Oesell to Hondtsorte northnorth-west, and north & by west 16 leagues.

How these lands doe shew themselves at sea.



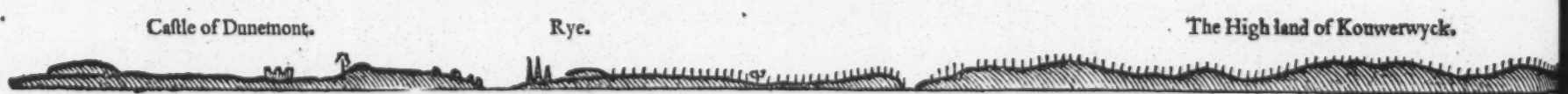
Coerland sheweth it selfe in this forme betwixt Lyserorte and Domesnes, when you saile alongst by it.



Thus sheweth the coast of Coerland from Domesnes past Derwinda and the Backovens towards Der Lyba.



Thus sheweth Coerland to the eastwardes of Domesnes.



When you come against the mouth of the Duyn, the River of Rye, the land sheweth it selfe on both sides of it, thus.

C H A P. V.

A Description of the Coasts of the Iland Dageroort, of the Moen sound, and the norther part of the Baye of Rye,



*Towre upon
Dagerorte.*

Hondtsorte, the northwest point of Oesell, and the point of Dagherorte lie northnorthwest, and southsoutheast about 8 leagues distant. Betwixt them both is a great bay, there runneth also a channell through, but it is so showld, that no ships can go through, and all over sharpe and uneven ground. Vpon Dagherorte standeth a high towre which the Worthy Counsell of the towne of Ravell caused there to be builded, for to knowe the land by, which men may see on both sides of Dagerorte farre into sea, and also may see it over the land farre in the foresaid bay.

Vnder the point on the south side of Dagerorte is good lying for north & northeast winds and cleane sand ground,

yon may sound about by the point of Dagerorte in seven or eight fathome, on the north side of the point is good road for southerly windes.

From Dagerorte to Syburghnes the coast lieth northeast seven leagues. Betwixt them both, to wit, three leagues from Dagerorte, and four leagues from Syburghnes, lieth a ground, going flat off thwart from the land northwest into sea, at least five or sixe leagues, almost in manner as the great Iuttish riffe, is first of three, four, five, sixe, and seven fathome deepe, and waxeth deeper by little & little towards the Finnish Scheers, where at last it runneth to nothing.

About three leagues without the land of Dagherorte, north and north and by east from the high towre, there lieth a suncken rock which is verie steepe, whereupon there is no more then tenne foot water: A man of Ossaenen hath beaten upon it which went no deeper then eleven foot and a halfe, presently after the stroke he cast the lead, and found 5 fathome depth. The Towre of Dagheroort was then from him south and south and by west.

Syburghnes is an out point, with two points, from each of which

of which shooteth off a riffe, betwixt these two riffes is a faire flat sand strand, where you may ancker so neere the shoare as you will, in five, or four fathome.

A little to the westwards of the westernmost point of Syburghnes, not farre from the land lieth a showld under water, about so great as a shippe, whereupon it is not deeper then twelve foot.

From Syburghnes to Otgens-holm the course is eastnortheast seven leagues, betwixt them both goeth in the Moensound.

To the southwards of Otgensholm goeth in a great bay into the land, wherein lieth an Iland, and behind it a little towne called Hapsael, there you may ancker where you will. On the southwest side of this bay, runneth off a great showld or ledge of rocks at least a great league into the sea, which is verie broad, you may runne in alongft by it into Moensound.

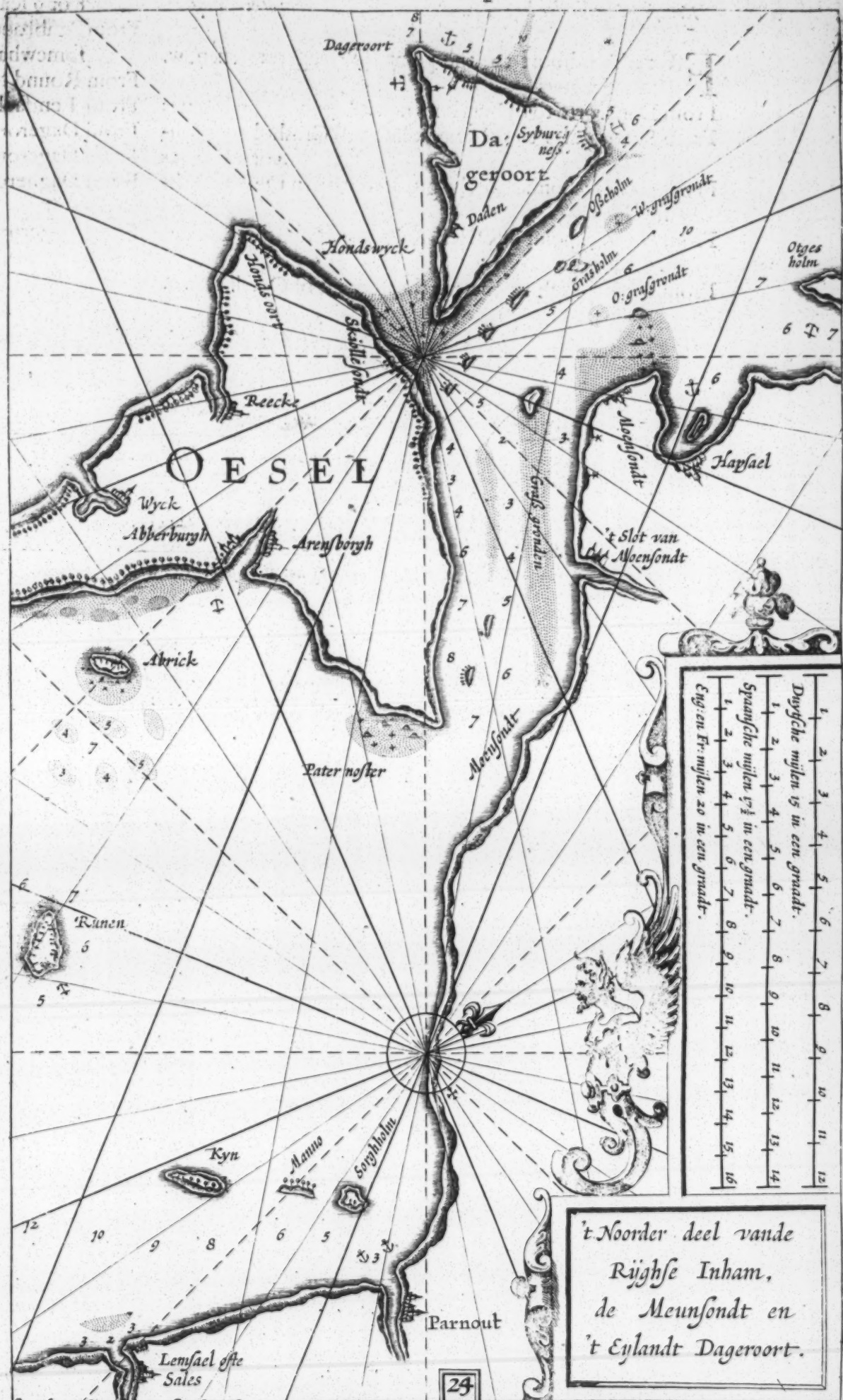
From Syburghnes to the Oxeholme & Grasholme the course is southeast four or five leagues, the Grasholme are two little greene Ilands, and the Oxeholme lieth about a league to the westwards of the Grasholme, about which you may faile, and ancker round about, a little league n. & n. & by e. from the Oxeholm lieth a peece of ground loose from the land, which you must avoid, called the wester Grasground, there are two showldes, which are called the Grasgrounds, the other Grasground, which is called the eastermost, lieth over against the Grasholm, towards the riffe of Hapsael, upon which there is no more then five foot water. He that will faile into the Moensound, must take heed thereof.

He that will faile off from Otgens-holme through the Moensound must goe on south southwest to the Grasholme, and faile in close by it, for to avoid the Grasground, which lieth to the eastwardes over against it. From the Grasholme to the point of the Oesfel, where the great tree standeth upon, the course is s. f. e. 7 leag. From the Grasholme towards Oesfel lie four little Ilands, each about a league one from the other.

When as you faile from Grasholme towards Oesfel, you must sail alongft by these little Ilands, leaving them lying about two or three cables lengths on the starboard side, untill that you come to the land of Oesfel, over against the great tree. In this farewaie it is 5 fathome deepe.

When as you come sailing so alongft past the Grasground, you shall meete with an Iland on the larboard side, to the northwards of it goeth in the Deepe unto the Castle of Moensound in three fathome, but sometimes it is showlder, for there it is all full off sands. To the southwards of the same Iland goeth in another Deep, which you may faile through, untill you come to the end of Oesfell; and then you leave the two little Ilands by the south end of Oesfell, lying on the starboard side. But the right and best Deep, goeth from the aforefaid great tree, in alongft by the land of Oesfell, which is three and four fathome deepe, and at last it will be fixe, 7, & 8 fathome: when you faile along there you leave the foresaid two little Ilandes by the south end of Oesfell, lying on the larboard side. From the great tree to the first little Iland the course is e. f. e. five leagues; & then from the first little Iland to the second southeast, and forth to the end of Oesfell east and by south.

From that end or northeast point of Oesfell runneth off



a foul riffe, a great halfe league into the sea, called the Parnout, which you must avoid.

From this northeast point of Oesfell unto Parno the coast of Lyfland lieth eastsoutheast and westnorthwest.

When you come about that point, you may faile into the sea or baye of Rye, where you wil, west and west and by n. to Arentsbergh, s. w. or somewhat westerly to Ambroocke, south to Round, southeast to Kinne, or where you will, the lying of Kinne is described here before.

From Kinne to Magno and Serckhollom all alongft unto Magno, Parno, the course is northeast and by north eight leagues, Serckhollom. Thwart of Magno and Serckhollom it is betwixt Coerland and the Ilands, five & six fathome deepe, and alongft Coerland altogether a faire strand.

Parno lieth in a great Baye, it is there in the road three Parno. and four fathome deepe. For to ancker there, you must ancker so that the steeple of Parno stand northnortheast from you, there is the best road.

How

How these lands doe lie one from the other, and from other lands.

From Hondsoort to the point of Dagerorte n. n. w.
8 leagues
From Dagerorte to Syburghnes northeaft 7 leagues
From Syburghnes to the Oxeholme and Grasholme south-
east 4 or 5 leagues
From the Grasholme to the great tree upon Oesell south-
southeast 7 leagues
From the n. e. point of Oesell to Parno eastsoutheast about
16 leagues
From Arentsbergh to the northeast point of Oesell e. n. e.

8 or 9 leagues

From Ambroock to the northeast point of Oesell northeast
somewhat easterly 9 or 10 leagues
From Round to the northeast end of Oesell n. 13 leagues
From Lemsaël to Parno north and by east about 9 leagues
From Dagerorte to the Rose-head southsouthwest 80 leag.
From Dagerorte to Eastergore southwest 37 leagues
From Dagherorte to the Godtsche sand southwest and by
west 27 leagues
From Dagerorte to Boechschaer west & by n. 21 leagues
From Dagerorte to the point of Aland or the Ilands north-
west and by north 20 leagues

How these foresaid lands doe shew themselves at Sea.



When Dagherorte is northnortheast four leagues from you it sheweth thus.



Dagherorte being northeast from you three or four leagues sheweth it selve thus.



In this forme appeareth Dagherorte, when the towre is east and by south, and the northermost point is east from you four leagues, and then you may even see it in cleare weather from below.



When as the towre upon Dagherorte is southeast and by south, and the land to the eastwards of it is southeast four leagues from you, then it sheweth it selve thus.

Syburghnes.



When the towre of Dagherorte is southsoutheast from you, then it sheweth it selve (with the land to the westwards of it) thus.

Syburghnes.



Dagherorte.



Thus sheweth the land of Dagherorte towards Siburghnes.

C H A P. V I.

*A Description of the Coasts of Lyfland betwixt Dagerorte and Revel:
and also of Finland, lying to the northwards over against it.*

Oetgens-
holm.



Oetgensholme and Syburghnes lie east-northeast, westsouthwest, and east and by north, and west and by south, seven leagues distant one from the other.

You may saile round about Oetgensholme and also ancker under it, for northerly and northwest winds in fixe or seven fathome.

Great Roge

From Oetgensholme to great Roge the course is east & by north 4 leagues, betwixt them both, a little to the southwards of the farewaie lieth a showld even above water, which you may saile round about; but you may not come verie neare it, because it is stonie and rocke round about it. Great Roge is an out point with two or three white chalck hilles, and thereby is verie good to be knowne. Betwixt this point and Oetghensholms somewhat more southerly lieth another point, called Little Roge, betwixt it and great Roge, goeth a broad Sound into the land of fixe and seven fathome depth, but in the end it is showld. There abouts it is all cleane ground, and good for to ancker in.

Little
Roge.

From Great Roge to the Iland Nargen the course is east five leagues. When you saile from Great Roge towards Narghen, you shall find four leagues to the eastwards of great Roge an other point with two white chalck spots, called Surp, betwixt it and great Roge, the land falleth awaie

to the southwards, into a great bay. If you will saile to Revel, then saile alongst by that point of Surp, towards Narghen, leaving it on the larboard side of you, going on still east, untill you come to the east end of Narghen. Being thereby it, then goe on eastsoutheast a league and an half, and then you shall come by the end of the riffe, which lieth of from the Blote Karels, come no nearer it then in six fathome. When as the castle of Revel commeth without the Karels, then sail right unto the head of Revel, untill you come to the east side, let your anker fall there, and then haell with the fore-ship or stearne, to the head, and make you fast by fore cables, for the north and northnorthwest windes which blow there flat open in, making it a lee shoare, so that sometimes with such winds there commeth in a rowling sea.

East and wel so northerly about 4 leagues from the south end of Nargen, lieth the Iland the Wolfe, which is about a league long.

Northnorthwest, and northwest & by north two leagues from the west end of the Iland the Wolf, & northeast and northeast and by east from the north end of Narghen lieth a rock under water, called the Revel-stone, although there be no more water upon it then 3 or 4 foot, yet it is in the Summer time with faire weather, oftentimes so smooth water, that it doth not break upon it, and it is also verie steep, so that you may not come neerer it by your lead then in 12 fathome. The markes for to know the place of this Revel-stone are these. When the northeast end of Narghen is southwest & southwest & by west from you, and the high steeple of Revel is a capstone barrs length, or a little more to the westwards of the westend of the Iland the Wolfe, then you

The Wolfe. you are right thwart of this rock. The steeple of Revell is also then right south from you. But when the steeple of Revell commeth to the Wolfe, and that you are bound to the eastwards, then you are surely past this Revell stone, and a good waies to the eastwards of it.

From the west end of the Iland the Wolfe lieth off a riff to the northwards into the sea, about an English mile toward the Revelstone, upon the end of this riff lie 5 or 6 rockes a little above water. If you come away from Revell on north & by west alongst by the Wolf, then Marke the point of Surp, when that commeth even unto the south end of the Iland Narghen, then you shall also have even the length of the foresaid riff. If you looke out then on the starboard side, and be not failed verie farre alongst to the westwards of the Wolf, you shall see the foresaid rockes (lying upon the end of the riff) lie thwart from you, & then you may runne to the northwards about by them in 5 fathome without doing amisse.

Showld of Narghen. Betwixt Narghen and the Wolf lieth also a stony showld which is verie broad, but much neerer Narghen then the Wolf, and lieth from the south point of Narghen about northeast, and from the north point eastsoutheast. Therefore if you bring the south point of Narghen about southwest or southwest and by south, & the foresaid north point w. n. w. from you, and that the Wolf lie then free from the maine land, you shall not misse to fall upon this showld. You may faile round about Narghen, and also ancker under it for northerly and westerly winds in 10, 12, 14 and 18 fathome. From Narghen to the Iland Wranger the course is east and by south 7 leagues. The lying thereof you may see in the chapter following.

Of the coast of Finland betwixt the Alands Haffe and Elsenvos.

Alands. Betwixt Vxe or Bostell on the coast of Sweden, & the Ilands of Alandt, goeth in the Alandt Haff, which men doe call the North Bodem, which lieth up so farre to the northwards into Fioland, that a ship with good fresh way showld scarce be able to faile to the end of it in five dayes: upon the farthest end of this North Bodem lieth the towne Toren, there Sweden is parted from Finland.

Ercke. Corpe. At the outermost rocks of Finland on the Alands-Haff lie 3 Ilands, Ercke, Castelholm and Corpe. Ercke is the westernmost of all, & the outermost, from thence goeth in the Corpefound, northeast alongst thwart of Castelholm and Corpe. Corpe lieth within the other Iland, and from Corpe you may edge over into the Liet of Abbo, which commeth running off from Wttoy: you may also sail up into this channell about behind Lipland, & so come out into the North Bodem.

Wttoy. Wttoy is a great Iland, upon it standeth a great mast with a barrell for a beakon, and lieth from the Iland Corpe east and west about 9 leagues. On the west side of Wttoy goeth up the Liet of Abbo, which lieth in first n. & n. & by e. about 3 or 4 leagues, and then you come on against a great Iland. And then it lieth in alongst that great Iland northeast unto

the Sound of Abbo, Abbo lieth at the end of that foresaid great Iland. This Liet runneth up alongst to the eastwards through betwixt the rocks, about 13 leagues within it lieth a rock under water which is a Magnes or Load-stone, also the ground seemeth to be there of the vertue of the Load-stone, for when you come thereabouts, the compasses doe not stand, but run and turne without any certain standing still, untill that you be at least a league past it, and then they begin to stand right againe. From thence it lieth east and east & by south all alongst through the rocks unto the Rough Iland, to the westwards of it runneth the channell of Luys into the sea, when you are thwart of it at sea, you may see the land of Revell, it is there betwixt them both, to wit, betwixt the Out-rockes & Nargen, or the land there abouts ten leagues broad.

The Out-rockes of Luys, & the channell of Wttoy lie east & west about 21 leagues distant, although it be there betwixt them both all broken land, and full of rocks, yet nevertheless there are no havens nor channels fit for ships to come into.

From Luys alongst without the Rocks to the channell of Elsenvos the course is e. & e. & by n. 15 or 16 leagues, but Nargen or the Wolf, & the channell of Elsenvos lie north-northeast and southsouthwest about 16 or 17 leagues asunder. The lying whereof read in the chapter following.

How these places lie one from the other, & from other lands.

From Syburghnes to Oetgensholm east and by north 7 leagues
 From Oetgensholm to great Roge e. & by n. 4 leagues
 From great Roge to Surp east 4 leagues
 From Roge to Nargen east 5 leagues
 From the south end of Nargen to the Iland the Wolfe, east & east & by north 4 leagues
 From Revell to the Wolfe n. and well so easterly 5 leagues
 From Oetgensholme to the out rocks of Luys north and by east 15 or 16 leagues
 From Syburghnes to the channell of Abbo, or Wttoy north-west 20 leagues
 From Wttoy to Ercke the outermost Iland of Alandt west 9 leagues
 From Wttoy or Abbo to the channell of Luys the course is east 21 leagues
 From Luys to the channell of Elsenvos east and east and by north 15 or 16 leagues
 From Nargen to the channell of Abbo the course is west-northwest 32 or 33 leagues
 From Nargen to the channell of Elsenvos northeast and by north 16 leagues
 From Nargen to the Out-rockes of Luys northwest and by north 13 leagues
 From the Wolfe to Peltingschares n. e. somewhat easterly, or northeast and by east 20 leagues
 From the channell of Abbo to Boeschaer southwest and by south 16 leagues

How these Lands doe shew themselves at sea.

High Hill.

Thus sheweth Syburghnes when the high hill is southsouthwest foure leagues from you, there it is five and thirtie and sixe and thirtie fathome deepe.

Thus sheweth Revell when you are by the Revelstone without the Wolfe.

The forme of Oetgensholme.

C H A P. VII.

A description of the coasts of Lyfland, Rusland, and Finland betwixt Revell and the furthest of the east sea.

THE Iland Wranger lieth from Narghen east, distant seven or eight leagues, and three leagues east and by south from the Wolf. Vnder Wranger is on both sides good road and good ancker ground, especially on the south side, where there is a Bay, there you may ancker betwixt the two points in tenne, twelve or fourteene fathome, according as shall bee convenient, and lie sheltred for a northeast and east, and also for a northwest and west wind. You may saile round about Wranger, but from some points (as from the two south points, and from the north point) lie of some little riffes, whereof you must take heed, and be carefull in using the lead when you sail about by them.

About an English mile from Wranger lieth little Wranger, a little long small Iland, lying about northwest and southeast, which is rocky and foule, especially on the northeast side. From the southeast point runneth off also a rocky riffe whereof you must take heed.

On the southwest side is good anckering for northeast and eastwindes, ancker under it so that the southeast point lie about east from you, there is good lying for northeast and east windes.

From the northwest point runneth off also a little riffe, which you may sound about in foure, five or sixe fathome, according as your ship goeth deepe, when as you will goe to ancker there comming from the northwards, or about to the northwards of the Iland.

About a great league north from the east end of Wranger, and two little leagues north and by west from little Wranger, lieth a little Iland, which by some is called Kuyc-ken, but commonly is called the Kockschaer, which is a little bare rock with a Warder upon it, you may sail round about it on both sides, it lieth from the Wolf northeast and by east distant two great leagues.

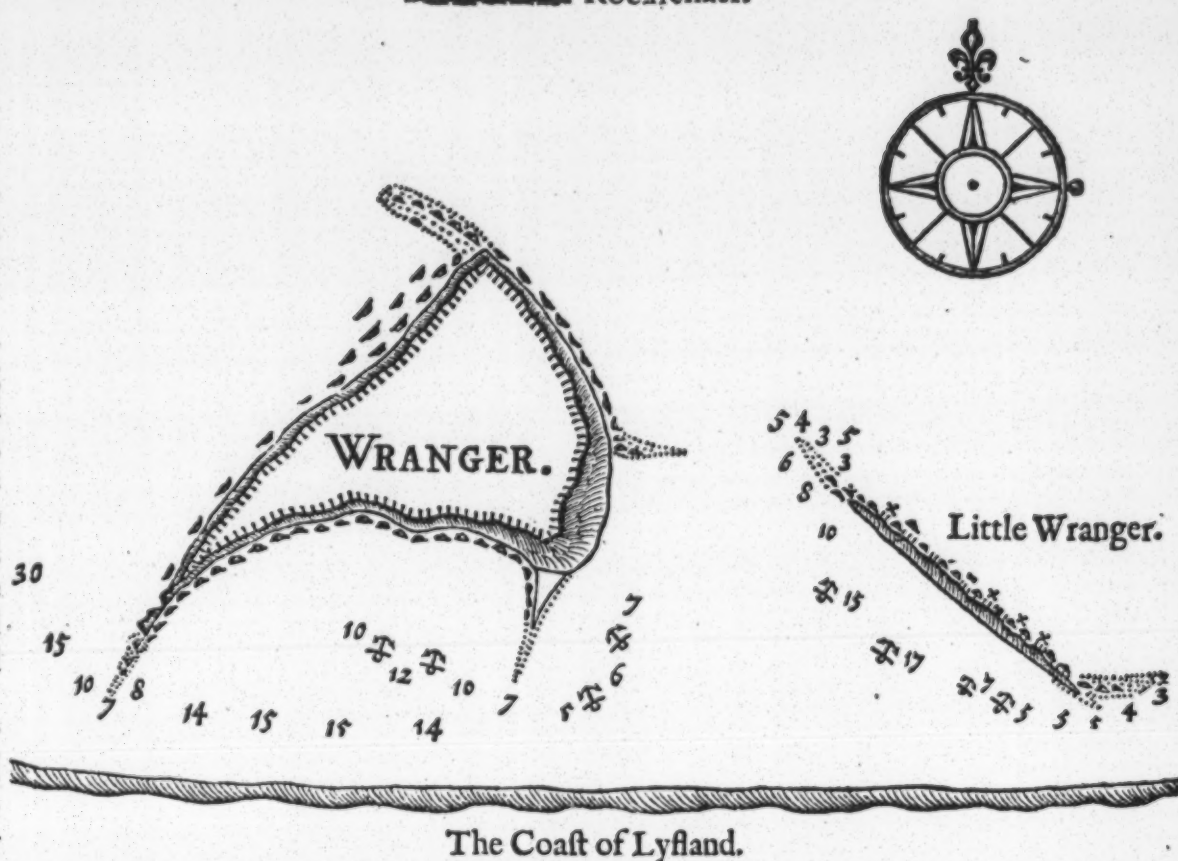
From Wranger to Eckholme the course is east southeast thirteene leagues. Three leagues by west the Eckholmes lieth an out-point, to the eastwards of it is a Bay called the Monckwyke, there it is good anckering for southwest and west winds in eight, tenne or twelve fathome. Betwixt this point of the Monckwyke and Wranger, lie three little long Ilands, lying alongst the coast of Lyfland, about a halfe league from the shoare, which are verie foule and rocky, and almost nothing but rockes, whereof you must take heed, otherwise the coast betwixt them both is cleane.

The Iland Eckholme is cleane round about, and lieth about northwest and southeast, it sheweth it selfe high at both ends, and in the middest with a valley. Vnder Eckholme is good anckering at the northeast side for west and southwest winds in 20, 22, and 25 fathome, and on the southwest side for easterly winds.

Five leagues to the eastwards of Eckholme lieth the castle Telsburgh, thwart of it lieth off a showld from the shoare, but you may sound in 8 or 9 fathome. From thence the coast lieth alongst most east and by south unto the road of the Narve about sixteene leagues, it is altogether cleane without foule ground, so that you may also sail alongst there by night in 8 or 9 fathome without feare.

Northwardes from this coast in the farewaie betwixt Eckholme and the Iland of Highland, lie the Chalck-grounds,

Kockschaer.



Hoftes, the little and great Tutters, all of them with verie dangerous foule grounds and showlds. Eckholm & Highland lie eastnortheast & westsouthwest distant about 11 or 12 leagues. About 2 or 3 leagues east and by north, or east-northeast from Eckholme, and also two leagues from the maine land lie the Chalck-grounds, which are foule grounds almost three leagues long under water, and lie to the westwards westnorthwest into the sea, and to the eastwards almost to the riffes of the Hoftes. Some say that they are fast to it, so that you should not be able to saile through betwixt them.

The Hoftes lieth southsouthwest from Highland about five or sixe leagues, which is a long small Iland foule round about, with two foule riffes that lie out, the one lieth off somewhat to the eastwards, and the other to the westwards unto the Chalck-grounds.

Northwards from the Hoftes lie the little Tutters, and two leagues to the eastwards of the little Tutters lie the great Tutters.

The little Tutters are two Ilands not high, but round about rocky, rissy, and foule, they lie southwest and by south about three leagues from Highland.

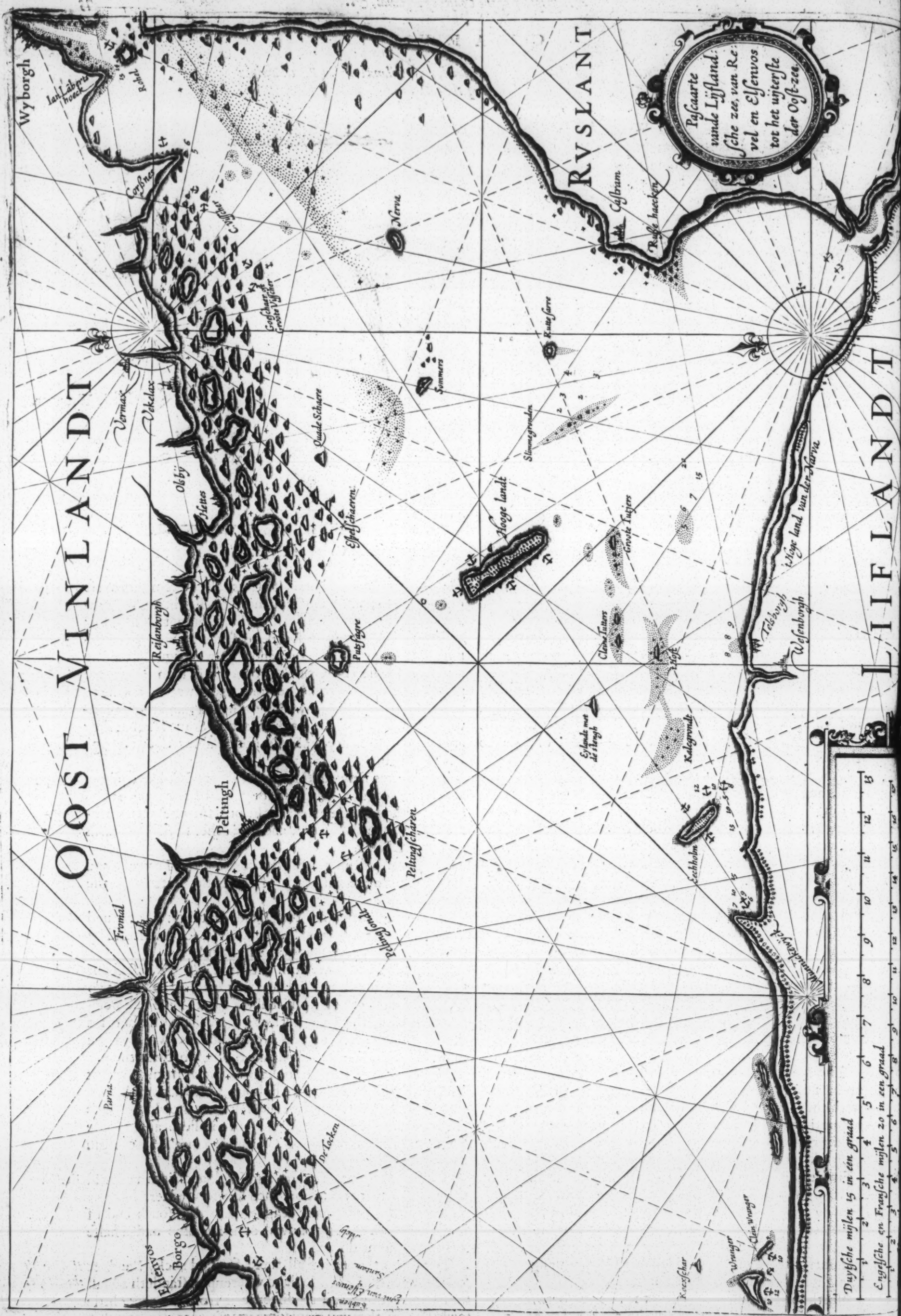
The great Tutters lie from the little Tutters east about two leagues, and from Highland south and by east also two leagues, there lieth off from it also a great stonie riffe westwards towards the little Tutters: there lieth also betwixt the little and great Tutters a row of rockes, whereof you must take heed when you will saile through betwixt them.

Southeast and by south about two leagues from the great Tutters lieth a showld of five fathome. He that will saile to the southwards of these foresaid Ilands & showlds towards the Narve, may be mindfull thereof, it lieth about foure leagues to the eastwards of Telsburgh 2 or 3 leagues from the shoare.

Betwixt the great Tutters and Highland lieth a showld upon which there is no more then sixe foot water.

Southeast a great halfe league from the south end of Highland lieth another showld of a fathome and a halfe and two fathome deepe.

To the northwards of all these foresaid rocky Ilands & foule showlds, lieth a little Iland whereupon standeth a Mast for to know it by, and to discerne it from the other little fowle Ilands, that you may come indifferente neare to, but



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Engelsche en Fransche mijlen 20 in een graad

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not too neare, for it is also somewhat rocky and fowle, but not farre off, it lieth from the little Tutters west and by north about 2 leagues, from the Iland Highland f. w. and by west at least 4 leagues, but from Wranger or the Kocx-schaer east and by north 20 leagues.

He that wil saile off from Wranger towards the Narve alongst to the northwards of these foresaid grounds, and doe get sight of this little Iland with the mast, may therby the better know to direct his course, but it is not wisdom to saile through these foresaid showlds, except for them that are verie there wel acquainted.

The Iland Highland, or Hoghland, is about 3 leag. long, and not a league broad, lying southsoutheast and north-northwest. When you come out of the west, it arriseth in 3 hommocks, so high to look to as Coll in the Scaw reach, upon the north end and upon the east side it doth stand all full of trees. A little about the north point on the east side is a little bay thwart of a Boers house, there it is cleane ground, and good lying for westerly & southwest windes, somewhat to the southwards of it, not verie far from the shoare, lieth a great rock above water. At the north end is also good lying for a southeast wind. Alongst the southwest side you may also ancker everie where in 16, 17, or 18 fathome close by the land for east and northeast winds.

From the southwest side of Highland unto the road of the Narve, the course is southeast about sixteen leagues, and then you runne through betwixt the Highland and the Tutters.

Likewise when as you saile on northwest from the road of the Narve, then you runne alongst betwixt the Tutters and Highland, but you must be verie carefull, & take heed of the foresaid showlds, which lie betwixt them both.

The land of the Narve men do know by three high hills, lying a league to the westwards, or to the southwards of the road, and a league further to the westwards stand some little houses upon the high land.

The towne of the Narve lieth upon a river about two leagues within the land. For to saile in there men were wont to look out for a long hill, which lieth on the south side within the rivers mouth, and at the east end goeth downe somewhat steep, with some high trees to the eastwards of it, then they brought the wooden tower of the Narve to the northwards of the foresaid trees, and did runne in so with it. When as the eastermost of the 3 foresaid hills (a league to the westwards of the rivers mouth) came over a little hommocke which lieth on the water side, then they, were upon the barre of the rivers mouth, there was upon the showldst ten foot water, and then they sailed up the river; that was wont (for some yeares) to be so, but it is possibly since that time more or lesse altered, like as it doth oftentimes happen in such rivers.

From the road of the Narve to the Ruffe haecks the course is northnorthwest five leagues, which lie with many rocks a good waies off from the shoare, The point thwart of it is called the point of Castrum after a little town (so called) lying there.

From the Ruffe-haecks northnorthwest five leagues lieth a little Iland called Rette Sarre, from which there runneth off a riff south into sea. From this Iland, or a league to the westwards of it unto the Summers the course is south and north four or five leagues.

Eastsoutheast from Highland, and 3 leagues from the Ruffe haecks lieth another showld called the Slimme-grounds, it lieth long & small alongst northnorthwest and southsoutheast, with hard wind you may see it breake at four or five places: when it is west from you about halfe a league, there it is two fathome deepe: to three, foure, five & fixe fathome, uneven ground, some of the rockes of it, lie also above water.

From the Ruffe haecks to the Rode-hell the course is northeast and by north about foure and twentie leagues, betwixt them both on the Ruffe side, runne also divers rivers into the land, but there is no trade. The land there lieth in a great bight, it lieth first from the Ruffe-haectes unto the River of Nioa, or Oreschacke eastnortheast about thirteen

leagues, there parteth Rusland from Finland by a great Meer or water, called the Lading. The Lading.

The strong castle of Noetenburgh lieth there also upon a river which lieth out of the Lyflands or east sea into the foresaid Lading. Further the land lieth northnortheast, and north and by east about thirteen leagues unto the Rode-hell.

For to saile from Revell to Wyburgh.

From a little to the northwards of the Kocx-schaer to Highland the course is eastnortheast a little more easterlie 23 leagues, with that course you runne alongst a little to the northwards of it. You may saile about Highland on both sides, but alongst to the northwards of it is the right fare-way for those that are bound to Wybrough. A halfe league north and by west from Highland lieth a suncken rock under water. For to avoid it you must saile close alongst by Highland. Further, the lying of Highland hath been described here before.

From Highland to the Summers the course is east wel so northerly 7 leagues. Summers. Sommers is a rock or little Iland almost like the Eartholms, it sheweth it selfe in three hommocks. A little to the eastwards of it lie some rockes above water: you may sail about on both sides of Summers, and also through betwixt Summers & the foresaid rocks that lie to the eastwards of it: but about to the northwards of it is the right farewaie, you cannot also runne alongst farre to the northwards of it, for a halfe league to the northwards of it, it is verie fowle & full of little rockes, some above & some under water.

From the Summers to the Goefchaer the course is north-east and by east seven leagues. Goefchaer, or great Fisher. The Goefchaer which by some is called the great Fisher is a long & broken Iland of 7 rockes, therefore it is also called the Sevenrockes, it lieth not far from the land, so that you cannot get sight of it, before that you come neare it, it sheweth it selfe when you shall first see it, in 4 hommocks, as if it were four little low Ilands, you must leave it lying a halfe league on the larboard side, for to avoid a suncken rock which lieth off from it f. f. e. a great shot of a cast peepe, when the water is not verie smooth, but a little grown, you may perceive it by the breacking of the water: you may also well sail to the northwards of this suncken rock, to wit, through betwixt the suncken rock and the Goefchaer, then you must runne indifferent close alongst by Goefchaer; when it is northwest and by north from you, then you are past the foresaid sunken rock, whether that you runne alongst to the northwards or to the southwards of it.

From the Goefchaer or great Fisher to the little Fisher, Little Fisher. the course is northeast and by east three leagues. The little Fisher is a bare round rock which lieth not farre from the land: when you come neare it, you may know it well from the other rockes, because there lie none so farre from the land alone, you may saile about it on both sides, but alongst to the southwards of it is the right fare-waie. About a shot of a cast peece southeast, or southeast and by east from this little Fisher, lieth a black rock with the top even above water, almost like a buye upon the Fliestreame, to see to a farre off as if it were a Seales head. This rock you must leave on the starboard side, and runne through betwixt it and the fisher.

Hee that must turne to windwards here abouts, let him not come verie neere this rock, for men doe hold that there lie more rockes by it under water.

Both the Fishers are otherwise clean round about, so that you may also finde road under them.

From the little Fisher to the point Corfnes, which the Lubickers doe call Kruijsort, the course is eastnortheast somewhat easterly a league. Corfnes. Corfnes is a point going off low of the maine land, not verie cleane, which you must leave on the larboard side. To the westwards of Corfnes lie two little Ilands close to the land. Thwart of the point lieth a rock almost like a little boat, you may runne about by it in foure fathome and a halfe, but not nearer. On the east side

of that point you may ancker for westerly winds in 3 or 6 fathome.

About two leagues thwart off from Corfnes, lie verie many rockes, some one fathome, some a halfe fathome, some more, and some lesse under water, you may not goe out of the farewaie without great feare and danger. It is impossible to describe al the uneven grounds, the great multitude of rocks and rocky showlds which are lying there abouts.

Rodehell. From Corfnes to the Iland Rodehell the course is north-east and by north about three leagues. Rodehell is a great rough Iland with a saddle in the middest, which you must leave lying on the starboard side. The north point is a red point, there stand up long staves over end, like unto a Warder in Norway, you must goe close alongst by them, or you may runne in amidst the channell, according as shall bee best convenient, but you may not goe close by the north point over against it (which the Dutch Shippers doe call Ian Lambertsons point) because of a stonie and steepe little riffe which lieth off from it, but you may runne about by it upon your lead in seven or eight fathome, but may come no neerer; the right farewaie betwixt them both is fourteene and fiteene fathome deepe.

Betwixt the point of Corfnes & the Rodehell, it is not without danger to turne to windwards, especially you must be verie carefull not to runne too farre over to the southwards, but to the northwards, towards the maine land it is indifferent cleane: it is there in the farewaie fifteen fathome deepe, soft clay ground.

For not to misse this foresaid channell, or the north point of the Rodehell, then take marke out a stearne of the little Fisher, bring that even without the point of Corfnes, and keepe it so standing sailing towards the Rodehell, and so you shall not faile to fall right before the channell. This is a sure marke whereupon you may trust. If you fall somewhat to the southwards of the foresaid channell, you can see no opening, but seemeth to be all whole to the maine land, so that men (that are not well acquainted) might not know where to seeke the channell, but sailing to the northwards the channell doth open it selfe.

When as you shall be then within the foresaid point of Rodehell, you may ancker there where you please, & fetch a Pylot from the land, which may bring you up to the towne Wybrough. It is there within fifteen fathome deepe, and good soft clay ground.

If you will (being come within the Rodehell) saile up to Wybrough, then goe on east & by south a shot of a cast peece unto a black point, leave that about 2 cables lengths on the larboard side, for there it is not cleane. Being a little past this black point, then go on northeast, or eastnortheast a halfe league, & then you shall come against a great white sandbay, but before you come by this sandbay you shall meet a rock with a gray stone like a buye upon the Fly-stream, leave that foresaid rock on the starboard side, and the gray stone on the larboard side, & run amidst the channell through betwixt them both, there it is 3 fathome deepe. It is no wisdome to saile up there for him that hath not beene there before, but it is best to ancker a little within in Rodehell, and to let him be brought up by a Pilot.

The Coast of Finland betwixt Elsenvos and Wybrough.

THe Channell of Elsenvos lieth from Nargen or the Wolfe northnortheast and southsouthwest about 16 or 17 leagues, and from Wranger south and north.

Kubben. Upon the west side of the channell lieth a high round rocke, whereupon standeth a mast, or Warder, called Kubben, over against upon the other side of the channell lieth a long rocke or Iland called Sautum, and an halfe league to the eastwards of Kubben lieth another great round rock called Mely. These three rockes are the best markes to be knowne of this foresaid channell.

Betwixt Kubben and Sautum lieth that channell in from thence northeast, untill that you bee within the rockes, and then northnortheast and north and by east, untill you come

before the river of Elsenvos, there you may ancker betwixt the rockes in good anckerground.

There runneth also a Liet through within the rockes, where you may saile alongst, and come out againe into the sea Putsfagre, this runneth about verie crooked with many bights, but it is Pilots water.

If you wil saile to Borgo, then runne a league to the eastwards of the foresaid rock Mely, there you shall finde two high bare rockes, called the Tolcken, runne in betwixt them both, but neerest to the eastermost, which is cleane and cleare close to it, & lieth somewhat further to the seawards then the westermost. Westnorthwest from this eastermost high rocke, lieth a little rocke above water, leave that on the larboard side. When as then you shall be by this eastermost rock, which you leave lying on the starboard side of you, then goe on northnortheast to Schoeland, that is a rough Iland off from which lie many bare points, all which you must leave (with the Iland also) on the starboard side, then runne alongst close by these bare points. When you are past them, goe then northeast and by north somewhat easterly, and so you shall see two other bare rockes, the eastermost of the greatnesse of a shippe verie steepe and high, but the westermost is small, runne in there betwixt them: the Sound is called Cramer-poort. When you are within them, goe then in north and by east, and then you shall presently meet with a great Iland called Cramer, leave that on the starboard side, and so you runne right on with an other great Iland, called the Hester, leave that on the larboard side, and ancker betwixt the two Ilands Cramer & the Hester, there is good ancker ground.

From the mouth of the Sound of Elsenvos to Pelting-sound the course is east, & east & by south eleven or twelve leagues. Peltingsound lieth in northeast, there you lie within a great manie great rockes, or little Ilands, sheltred for all windes. You may saile from thence through within the rockes all over where you desire to be, if you have a good skillfull Pilot.

From Peltingschares to Putsfagre it is five leagues. Putsfagre is a great rock, or Iland, lying from Highland north and by west distant five or sixe leagues. About a league south from this Iland Putsfagre lieth a suncken rock, which you must avoid, Hee that will saile through within the rockes, let him take a Pilot from Putsfagre, that may bring him through the rockes where hee desireth to be: you may runne in there everie where, and within the rockes it is most all over good ancker ground.

From Putsfagre to the Epelschares the course is east seven leagues: these are a great many out-rockes, a little to the eastwards of them lieth a great rocke called Quadeschare which you may saile round about.

From Epelscharen to the Goeschare the course is east-northeast tenne leagues. That, and the lying of the land, and dangers from thence eastward, hath been described here before.

How these places are lying one from the other, and from other lands.

From the Iland the Wolf to Wranger east and by south 3 leagues.

From the Wolf to the Kocxschaer eastnortheast 3 leagues.
From the Kocxschaer to the east end of Wranger south & by east 2 leagues.

From Kocxschaer to little Wranger southsoutheast 2 leagues.
From Wranger to Eeckholm east and east and by south 13 leagues.

From Eeckholme to the Castle of Telsburgh e. s. e. 5 leagues.
From Telsburgh to the road of the Narve eastsoutheast 16 leagues.

From the road of the Narve to the Ruffehaecks north and by west 5 leagues.

From the Ruffehaecks to the River Nioa, or Oreschack eastnortheast 13 or 14 leagues.

From Oreschack to the Rodehell north and by east 15 or 16 leagues.

From

From the Ruffehaecks to the Rodehel northeast and by north 27 leagues.
 From the Ruffehaecks to the Iland Rette Sarre north 5 l.
 From Rette Sarre to Sommers, north somewhat westerly 4 or 5 leagues.
 From Eeckholme to the Iland Highland eastnortheast 11 or 12 leagues.
 From the westside of Highland to the road of the Narve southeast and by south 16 leagues.
 From Highland to the little Tutters southwest 3 leagues.
 From Highland to the great Tutters south 3 leagues.
 From the Iland with the mast to the little Tutters east and by south 3 leagues.
 From the Kocxschaer to the Iland with the mast east and by north 20 leagues.
 From the Iland with the mast to Highland northeast and by east 4 leagues.
 From the Kocxschaer to Highland east somewhat easterly 23 leagues.

From Highland to the Sommers east and by north 7 leag.
 From the Sommers to the Goefchaer or great Fisher northeast somewhat easterly 7 leagues.
 From the great Fisher to the little Fisher northeast and by east 3 leagues.
 From the little Fisher to Corfnes eastnortheast easterly 1 league.
 From Corfnes to the Rodehell northeast and by north 3 l.
 From the Sound of Elfenvos to Peltingfound east, and east and by south 11 or 12 leagues.
 From Peltingfound to Putsfagre east and by north 5 leag.
 From Putsfagre to the Epelschaers east 7 leagues.
 From the Epelschaers to the Goefchaer or great Fisher eastnortheast 10 leagues.
 From Eeckholme to Elfenvos northwest 16 leagues.
 From Highland to Peltingschares northwest and by west 8 leagues.
 From Highland to Putsfagre northnorthwest 7 leagues.

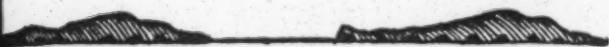
How these lands doe shew themselves at Sea.



The Iland Wranger sheweth thus when it is southeast and by east three leagues from you.



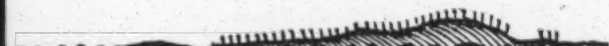
In this forme sheweth the Iland the Hufies, when you are to the southwards of it, and saile along by the coast of Lyfland.



The little Tutters shew themselves thus when they lie to the northwards from you.



Thus sheweth the land to the eastwards of the rivers mouth of the Narve, when you come thereabouts, comming off from the High land.



Thus shew the great Tutters when you saile alongst by the coast of Lyfland and that they lie to the northwards from you.



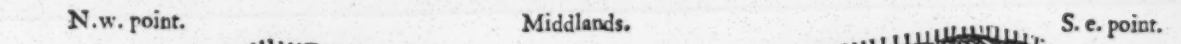
S. e. point.

N. w. point.

Thus sheweth Eeckholme when you come from the eastwards, and that it is to the westwards from you.



Thus sheweth the land to the eastwards of the Narve, when you come off from the High land.



N. w. point.

Middlands.

S. e. point.

Thus sheweth Eeckholm when you come from the westwards, and that it lieth to the eastwards from you.



Thus sheweth the Iland Highland, when you see it comming from the westwards.

C H A P. V I I I.

Of the Coasts betwixt Bronthollom or Sandthammer and Calmer.



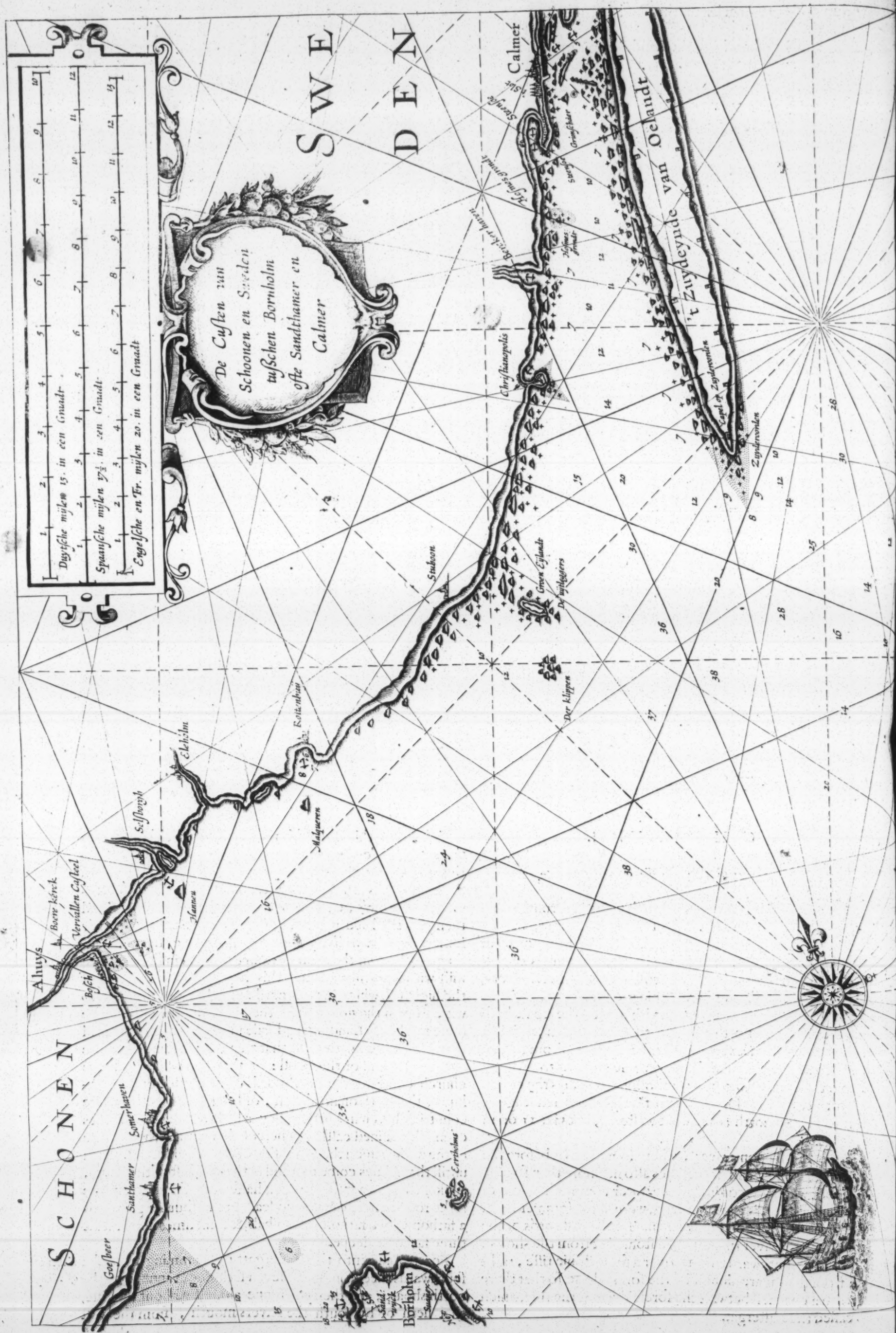
Et wixt the north point of Bronthollom and the point of Sandthammer, but nearest to Bronthollom lieth a showld of fixe fathome, where sometimes Fishermen doe lie to fish, it is not verie great, but hard stonie ground.

From Sandthammer the coast lieth northeast and by north a league to Somerhaven, this is a round bay, within it verie good anker ground. From thence the coast lieth about north five leagues unto Ahuys. From the north point of Bronthollom to Ahuys the course is north & by west somewhat northerly about ten leagues. But to Hanno north, somewhat westerly, betwixt 11 or 12 leagues.

Ahuys lieth upon a river, where sometimes is before the towne 10 or 11, and sometimes also no more then four or five foot water, according as the water commeth off out of the land, upon it is a great fishing, were in the sommer time, are great store of good Eels taken. To the eastwards of the mouth of the river runneth off a stonie flat from the shoare, & to the southwards of the river a foule stonie riffe, right off from the shoare alongst by the foresaid flat, so that there lieth in a channell betwixt the foresaid flat & the riffe, which is called the Eastergat.

Through this foresaid riffe lieth in a channell into the Eastergat, on against the flatte, which is called the Southergat. If you wil saile into this southergat, comming from the southwards, then runne to the west shoare to the southwardes of Ahuys, untill you come in 5 or 6 fathome, and then you shall see upon the north shoare, n. and by w. or somewhat more westerly from you, a cape or beacon standing a little from the strand within the land, in fashion like a mill without wings: Bring this beacon to the west side of the high hill, which lieth somewhat further into the land, to wit, even in the going off of the highest of the hill, keepe these markes so standing, and saile in right with them, untill that Ahuys commeth over that tree, which standeth there at the north end of the wood: or that the white Countrie church come to the northwards of the little houses of Ahuys, then goe on northwest, or bring that foresaid white countrie church in a little valley, a little to the northwardes of an old ruined castle, (whereof there standeth yet some of the walles, upon the north side of the River) & saile so on untill that Ahuys come to stand in the middest of the River, ancker there in 2 fathome & an halfe, or 3 fathome, there is the road, there can goe no sea. In this souther gatte it is 2 fathome, two fathome & an half, & sometimes also at least three fathome deepe.

For to saile into the Eastergatte, comming from the Eastergatt southwards, keepe in fixe or seven fathome, runne so to the north shoare, and then you runne alongst without the riffe, that lieth of by south the Rivers mouth, from the west shoare,



shoare, untill that Ahuys doe stand right west from you, then there commeth a great tree to the north side of the wood, that standeth upon the w. shoare, keepe that so standing & run in right with it, untill that the foresaid cuntry Church come to that aforesaid olde peece of wall, of the olde ruinous Castle, and then right in, as hath beene before said. Or run in by the first markes, untill within a shot of a cast peece neare to the westshoare, and then edge up to the north shoare, untill that Ahuys come in the midst of the River, and ancker there, as hath been said.

Hanno is a little high round Island, which men may faile round about, under it is good road for south and southeast windes.

Behind Hanno runneth up a little River to Selsbrough, but serveth only for small shippes or Crayers, which goe not deepe.

From Ahuys to the Rockes the course is east and by south twelve or thirteen leagues, betwixt them both lie divers little townes, as Eleholme and Rottenbuy, where men may ancker before in fixe, seven and eight fathome good ancker ground: and other Havens more, but little or nothing knowne by Hollanders. Thwart of Rottenbuye lieth a great rocke somewhat off from the land, called Malqueren, under which men may also ride.

From the north point of Brontholom to the Rockes the course is north northeast fixteene leagues, but from the point of Sandhammer east northeast and by east seventeen leagues.

The Rockes are some little rockes together, which men may faile round about, but can have no Road under them, they lie three or four leagues distant from the maine land, and are smaller then the Earholmes.

A league or two to the northwardes of them, lieth the Vrouwen or Greene Island, by some called the Rough Island, and also the Outliers: it is not so broken in it selfe as the Rockes, and also much greater, off to seawardes from it, lie some rockes: to the westwardes of it, it is all full of rockes, some above and some under water, alongst even fast to the land, you may faile about within the Greene Island betwixt it and the rockes, but no man can doe it, but he must be verie well acquainted there, and then also not without great danger. To the southwardes of it you may also find Road at some places, but you must be verie well acquainted, and also not without danger, by reason of the multitude of suncken rocks and sharpe grounds. The east side of the Outliers lie from the Rocks n. and by east. The south end of Oeland is a sharpe point, and lieth from the Rockes east and by west and n. w. and by s. about eight leagues distant. Thwart of it, betwixt the mayne land and the aforesaid south point of Oeland it is about foure leagues broad, betwixt them both, goeth in the Calmer sound.

For to faile up into the Calmer sound, then goe on from the Rockes, or from the Outliers northeast and by n. and northeast on, and then you runne in betwixt Oeland and the mayne land, faile in there betwixt them both amidst the channell, both the shoares are verie foule: but if you come not nearer them then in seven fathome, you can take no hurt there. From the Rockes to Calmer are fixteene or fixteene leagues: about halfe waies betwixt them, northwest from Southerorden, the southermost point of Oeland lieth the towne of Christianopol, lately builded there upon a little Island by the Kings Majestie of Denmark, and so called after his name. Thwart of it was wont to lie upon the maine land a little towne called Overschare, now it is one with Christianopol, thwart of it lieth a ledge of rockes about a great English myle off from the shoare southeast into the sea, come no nearer it then in ten fathome.

At Christianopol is a haven on the east side, from it lieth off a riffe towards the northeast into sea; therefore he that will faile in there, must come in from the northwardes for to avoid this riffe.

To the northwardes of Christianopol towardes Calmer, it is on both sides (as well on the side of the maine land, as on the side of Oeland) all full of rocks and foule grounds

East. water. 3 Booke.

but you may sound both the shoares: in the midst betwixt both in the farewaie, it is tenne and twelve fathome deepe, all soft claie ground, to the southwardes of Christianopol it is deeper, but to the northwardes towardes Calmer it is by little and little showlder.

Two leagues to the northwardes of Christianopol lieth Berckerhaven, there men doe lade oken beames, there wi- ^{Bercker} thin it is good lying, but verie bad for to come in or out, ^{haven.} because of the multitude of suncken rockes, and other foule grounds, which lie before it, about a halfe leagues off from the shoare to seawardes.

About a league to the northwardes of Berckerhaven lieth Hofmes ground, which is a verie bad foule ground, lying ^{Hofmes} somewhat farther off from the shoare to seawardes, then ^{ground.} the other rocks which lie alongst the shoare, thereof you must take heed.

About a league to the southwardes, and two leagues to the northwardes of Hofmes ground lieth a point called Steensoe, which is a somewhat high rough and verie foule ^{Steensoe.} point, a halfe league long, lying within a halfe league neare to the towne, to the westwardes of it runneth in a great bight, where is good lying also for many shippes, but you cannot come in there, because of the manie foule grounds and dangers, except it be with a verie skilfull Pilot: upon the west side, over against the point standeth a white house. The King of Denmarcks armie of shippes lay there, in the time of the last siege of Calmer.

When you come so farre in, that you leese the south end of Oeland out of your sight, then you gette the Castle of ^{Castle of} Calmer in sight, faile towards it but shunne the shoares, as ^{Calmer.} hath been said here before. The Castle hath 4 great towres, when the two eastermost of the four come on in the other, then is the Castle about northwest from you, then you, come by the Grimschaer, this is a Rock good to be knowne, ^{Grim-} upon it standeth a mast, with a Barrell upon the toppe of it ^{schaer.} which lieth much nearer the west shoare then Oeland, when you get it in sight, then faile towards it. Thwart of the Grimschaer or Tonholm lieth a suncken rocke, about a cables length off from it, and a little more to the eastwardes, upon it, is no more then five foot water.

The Farewaie is through betwixt this suncken rock and the Grimschaer about northeast and by north, faile close alongst by the Grimschaer, leaving it on the larboard side, and then the foresaid suncken rock remaineth on the starboard side of you.

Being a little past the foresaid suncken rock, and Grimschaer, you come then on against the westend of a long small rock, which lieth farre to the eastwardes, towards Oeland, and lieth almost even with the water, at some places a little above water, and at some places the sea runneth alongst over it, edge then a little up to the northwardes, and runne about by the point of that rock; being past that, you shall meet on the larboard side, a lowe rocke, from the which there shooteth off a little taile to the northwardes, upon it standeth a little beacon, faile alongst by it, and being a little past it, then shall the towne lie westsouthwest from you, let your ancker fall there in five or sixe fathome, there is the right road. If you come to ancker somewhat northerly in the road, you must be carefull to take heed of a suncken rock, which lieth not more then 11 or 12 foot under water.

The marckes of this suncken rock are these: when the mills ^{Sunken} upon the Mulholm are one in the other, with the mill which ^{rock.} standeth on the north side without the towne, then you are thwart of the foresaid suncken rocke; on both sides of it, as well to the northwardes as the southwardes of it, it is deepe enough. It is good lying there, almost with all windes, but a north and by east wind is the worst, which bloweth there in open. With shippes that goe not deeper then sixe or seven foot, men may come to lie at the bridge before the towne.

You may also faile to the westwardes of the Grimschaer: that is, through betwixt the Grimschaer and the land, with shippes that goe not deepe, but he that shall doe it must be verie well acquainted there, for there it is all full of Rockes, some above and some under water.

L

From

The riff of
Southeror-
den.

From the south end of Oeland called Southerorden, lieth off a great dangerous riff a league and a halfe into sea, there it is leven and eight fathome deepe, when the Chappell upon Southerorden is northwest a great league from you, there it is tenne and eleven fathome deepe; you may sound about this riff in eight or nine fathome, but it is not good to come nearer it, when you can doe otherwise and can passe by it.

The east coast of Oeland is a cleane coast, and lieth northnortheast, & southsouthwest.

Of the depths and grounds about these foresaid places.

IN the Farewaie to the northwardes of Brontholom alongst to Ry, it is deepe betwixt Oelandt and Brontholom five and thirtie, fixe and thirtie and eight and thirtie fathome, but comming against Oeland, so that the south end come to be northwest & by north, northwest, and northwest and by west five or sixe leagues from you, there you shall find verie uneven grounds. Southeast five or sixe leagues from Southerorden, are grounds of nine, tenne, twelve and sixteene fathome, in the ninne and ten fathome soft ground, that there remaineth nothing upon the lead, but in the fourteene or fifeene fathome, it is grosse redde and black stonie sand ground, almost like groats. Nearer againe to Oeland it is againe deeper water, and farther from the land it is also deeper, but all uneven ground; the south end of Oeland being about northnorthwest from you eight leagues, there it is againe sometimes twentie, fourteene and also well tenne and nine fathome in the showldst deepe, all stonie ground, that there remaineth nothing upon the lead, but in twentie and five and twentie fathome grosse redde and black stonie sand. He that faileth with a northerly wind over these foresaid showldes, of tenne, eleven, and twelve fathome, and is bound to Brontholom, let him goe on westsouthwest, for to saile cleare of Brontholom, if he reckon to come against it by night: the Bleecksche side he may bouldly runne to by the lead in seventeene and eighteene fathome. The point of Sandthammer runneth farre of flat, as hath been said here before, you may runne about by it in seven and eight fathome.

Betwixt the rockes and Oeland, in the farewaie to Gotlandt it is eight and thirtie, & nine and thirtie fathome deepe, also claye ground.

When Southerorden is northnorthwest somewhat northerly a league from you, there it is thirteene fathome deepe.

When the little chappel upon Southerorden is westnorthwest from you two leagues, there it is 30 and 31 fathome deepe.

When Southerorden lieth west two great leagues from you, there it is seven and twentie eight and twentie, and nine and twentie fathome deepe.

How these foresaid places doe lie asunder, one from the other.

From the point of Sandthammer to Somerhaven the course is north and by east 2 leagues
From Somerhaven to Ahuys north 5 leagues.
From Ahuys to Hanno eastnortheast 2 leagues.
From Hanno to the rockes the course is east and by south 11 or 12 leagues.
From the rockes to the Outlyers north & by east 1 league.
From the Outlyers to Christianopell northnortheast 7 leag.
From the Rockes to Calmer northnortheast 15 or 16 leag.
From the Rockes to Southerorden the south end of Oeland eastnortheast 8 leagues.
From Sandthammer to the rockes e. n. e. 17 or 18 leagues.
From the north point of Brontholom to Ahuys north & by west somewhat northerly 10 leagues.
From the north point of Brontholom to Hanno north, somewhat westerly 12 leagues.
From the north point of Brontholom to the Rocks north-east 16 leagues.
From the south end or east end of Brontholom to the Rockes northnortheast 19 leagues.

From the north point of Brontholom to Southerorden northeast a little easterly 21 leagues.
From the east end of Brontholom to Southerorden northeast somewhat northerly 24 leagues.
From Southerorden to Reefkol south and by east 24 leag.
From Southerorden to Rose-head southeast 33 leagues.
From Southerorden to Quinsbrough Deepe southeast and by east, and eastsoutheast 48 leagues.
From Southerorden to Dermemel east and by south, and eastsoutheast 48 leagues.
From Southerorden to Sevenbergen east and by south 48 leagues.
From Southerorden to Derwinda eastnortheast 57 leagues.
From Southerorden to the south end of Gotland northeast, easterly 23 or 24 leagues.
From Southerorden to the Great Karell northeast and by north 27 leagues.

The south end of Oeland sheweth thus, when it is thwart from you.

C H A P. I X.

Of the Ilands Oeland and Gotland.



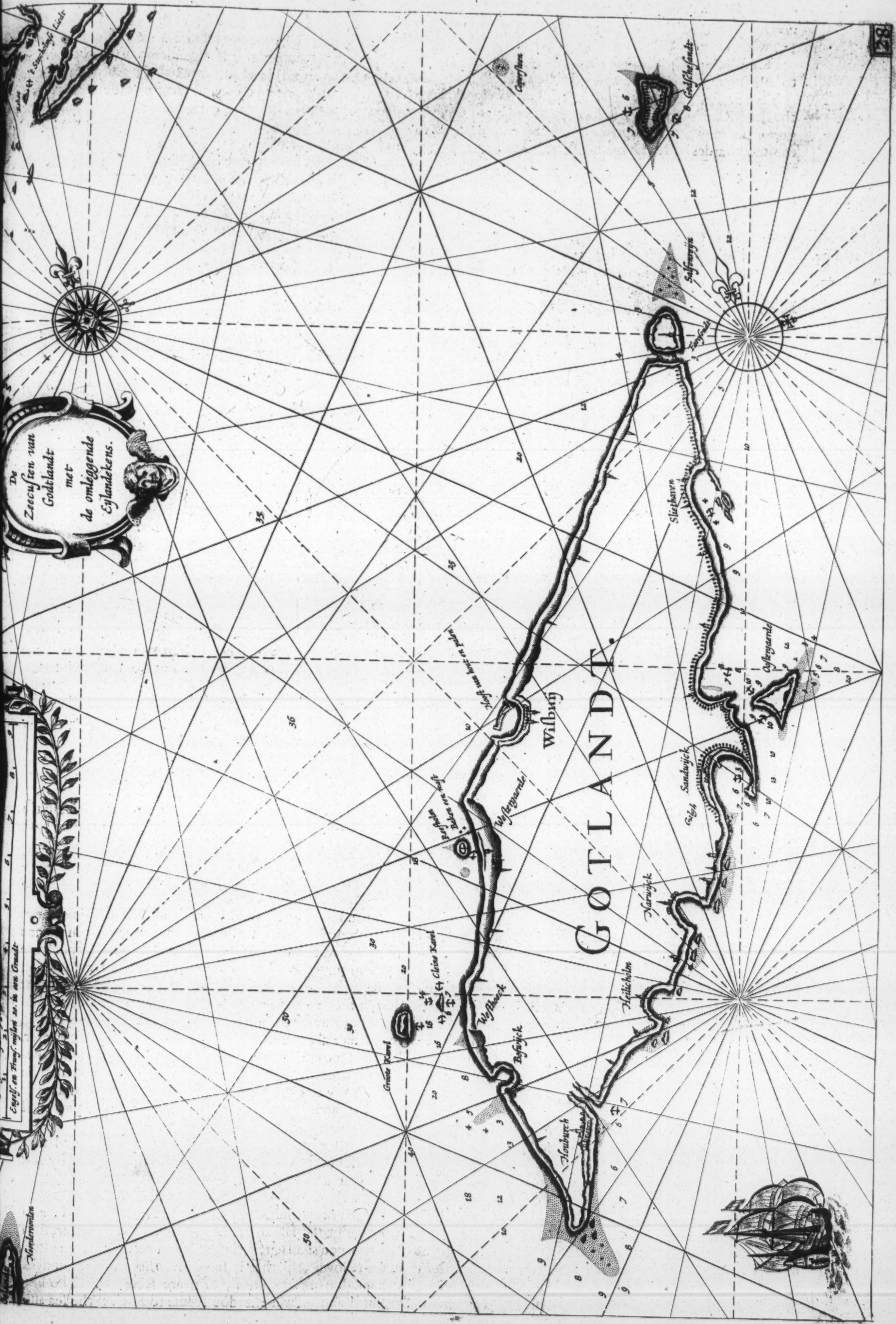
From the south end of Oelandt to the south end of Gotlandt the course is east-northeast three and twentie or four and twentie leagues, but to the Karels northeast twentie seven leagues. The course alongst the farewaie, for to saile from the south end of Oelandt through betwixt Oelandt and Gotland, is northeast and by north.

The Iland Oeland is twentie four leagues long, and a league and a half broad, when men saile alongst by it, they may count eighteene rowers upon it, which are all flat: the east coast is a cleane coast, and lieth northnortheast and southsouthwest, but about seven or eight leagues to the southwards of the North end, there shooteth of a little riff, thwart from the land a great half league into the sea, which men must avoid: by it goeth in a little haven, where indifferent shippes may goe in, otherwise Oeland hath no havens.

From the south end of Gotland runneth off a foule stonie riff, a good waies into the sea, you may runne about by it upon the lead in seven, eight and nine fathome.

The Karels are two little high Ilands, lying on the west side of Gotland north and by west about seven leagues from the south point of Gotland, and east and west, about a halfe league one from the other, the greatest is called the great Karell, and lieth a great league from the land: the smallest the Little Karell, and lieth about a halfe league from the shoare. When you come from the southwards, the great Karel sheweth it selfe in two hommocks, and the Little Karell in one hommock, & nearer to the land. Under the Little Karel is round about good road, in eight, nine, and tenne fathome, and is round about cleane & cleare, without foule grounds. Men doe ancker betwixt it and the land, in sixe or seven fathome, there it is good lying for all windes, as well for them that are bound to the eastwardes, as to the westwardes. He that shall be to the northwards of Gotland, & shall get a contrarie wind, may also ancker under the great Karel, but under the Little Karell is farre the best road. Under the great Karel men may ancker, on the west and east side, but on the north & south side it is foule, therefore come no nearer it by night, then in eleven or twelve fathome. Betwixt the two Karels it is 13 and 14 fathome deepe.

About halfe waies betwixt the Karels & the south end of Gotland, southsoutheast from the Karell, lieth the haven Boswyke: thwart of it runneth off a riff, from the westwall a good waies into sea, come no nearer it then in seven or eight fathome. When you are thwart of the afore said south point, about a halfe league from the land, & wil saile alongst to the



De
Zeeuſten van
Gotlandt
met
de omleggende
Eylandekens.

GOTLANDT.

Engelſ. en Frang. miſten 20. in een Gradiet
Norderwinden

to the northwardes of Gotland, you must not faile on more northerly then northwest, as well for to avoid that riffe of Boswyke, as for to faile a weather the Karels.

From Westhooke a league northerly to Boswyke, and so to Reefholm is alongst the wall all stonie and rockie.

Reefholm. Thre or foure leagues northwest from the Karel, lieth the Iland Reefholm, thwart of it men doe run into Westergore: you may faile and ancker round about it. A little to the northwardes of it lieth the high northwest point of Gotland.

Two leagues to the northwardes of the high point lieth the towne Wisbuy, about seven leagues northeast from the Karell. Men were wont in old tyme to lie there behind a great head or Chest.

Wisbuye. Wisbuye hath beene in times past a famous marchant towne, where was wont to be driven a great trade of marchandize, but is now through the wil of God, altogether fallen down, & come to nothing. The Hansea townes have a long time there held their Staple. The old Sea lawes were made there, and also the old famous Read-carde. Men may see yet to this day many old ruinous houses of costly marble, and hewen stones, whereby men may partly perceive & judge, what manner of statelineffe there hath beene.

Gotische sand. From Wisbuy the coast lieth forth northeast towards the end of Gotland about 9 leagues. But from the Karell to Gotchesand, the course is northeast, and northeast and by north one and twentie leagues: that is a little Iland, whereupon dwelleth no people, and standeth full of trees: you may saile round about it, which hath a whit strand. From the northwest point thereof shooteth off a little riffe, and likewise one from the south point, a good waies off into sea, towards the north end of Gotland. On everie side of Gotchesand, you may ancker in fixe, seven, eight, nine, tenne, and twelve fathome, all cleane and good ancker ground, but these foresaid risses you must avoid. It lieth northnortheast seven leagues distant from Faro, the north end of Gotland, when you lie there under it at ancker, you cannot see Gotland.

Copper stone. The Copper stone lieth from Gotche sand westnorthwest, and northwest and by west distant three great leagues.

Howbrough. Vpon the south end of the east side of Gotland standeth a high towre, called Howbrough, and thereafter the south end of Gotland also is called Howbrough. By it goeth in a little river, before which you may ancker in fixe or seven fathome.

Heylichholme. Five leagues northeast from the foresaid south point, lieth Heylichholme, which is a good haven; but by reason it is but little used, it is therefore also but little knowne.

Narwyke. Two leagues to the eastwardes of Heylichholme lieth the haven of Narwyck, upon the east side of the haven lieth a long rock, by which you must run in, within the haven you may ancker in four or five fathome.

Sandwyke. Two leagues to the eastwardes of it lieth Sandwyck, which is a good haven for a west, northwest, north, east, and southeast wind, and lieth in about north, a south wind bloweth there open in: on the east point, (which is a low bare point) lieth a Holme, which is fast to the land, upon it standeth a warder: from this point runneth off a little sand riffe, which you may found about in five or fixe fathome. Within at this Holme is a bridge of masts, which lieth off a little from the shoare. If you wil ancker there in the haven, then run in alongst by the east shoare, untill you come within the bridge, and ancker there nearest the east shoare, so that the foresaid east point doe stand southeast, or southeast and by south from you, in four fathome, four and an half, or five fathome, there is cleane clay sand ground, and verie good lying for west, north & east windes.

Eastergore. A league to the eastwardes of Sandwyke lieth the Iland of Eastergore, about halfe waies betwixt both the ends of Gotland northeast from the southwest point, this is a bare Iland, without trees. Vnder this Iland is verie good road for all windes, as well for them that are bound to the eastwardes, as to the westwardes. Comming from the westwardes, or from Sandwyke alongst by the land, then is the northwest point, (which is a high bare gray point) hidden behind a point of

the maine land of Gotland, so that it seemeth a farre off to be no Iland, but comming neare it, it openeth it selfe, that you may see large enough through betwixt them: saile in there betwixt them both, in the middest of the channell, it is there cleane and cleare, but somewhat uneven of ground, to wit, eight, tenne, twelve and fourteene fathome, but you need not to feare. If you will ancker under it for northeast or east winds, then ancker betwixt the land and the Iland, so that the foresaid bare gray point northwest stand north, and there southermost east from you, in nine or tenne fathome. Or if you will ancker for a south, southwest, or west winde, then runne further in about by that foresaid bare gray point, bring it southsouthwest from you, and ancker there in seven, eight, nine or tenne fathome, there it is clean ground of small whit and black sand. A little to the northwardes of the Iland is a great Bay on Gotland, there you may also ancker in seven and eight fathome, for westerlie windes.

If you will saile in or out, to the northwardes of Eastergore, then come not verie neare the Iland, because there lieth off a riff from the east point farre into the sea, which is a great halfe league without the land, not deeper then two fathome and a halfe, stonie and verie uneven, and is to be thought, that nearer to the land it is sholder and fowler. From the southeast side runneth off also a flat, a good waies to seawards, at some places not deeper then three, four and five fathome, & also verie uneven, whereof you must take heed.

Foure leagues north and by east from Eastergore lieth a haven called Sliet or Sliethaven, lying in north, and north and by west behind some little Ilands, there it is good lying for easterly, westerly, and north windes. Vpon one of the northermost little Ilands standeth a ruinous church. You must come in there alongst by the shoare from the southwardes. From thence to Farosound the coast lieth north & by west two leagues.

Farosound you may runne into, in two and three fathome water, there standeth a Church with a flatte steeple upon the land. From the north end of Farosound lieth off a foule dangerous riffe, a league and a half or two leagues into sea, called Salfonreyn, you must take verie good heed thereof, when you wil runne about to the northwardes of Gotland.

From Farosound to Gotchesand the course is northnortheast about 7 leagues.

Of the depths and grounds about Gotland and Oeland.

Betwixt the south endes of Oelandt and Gotland in the farewaie, it is uneven for to sound, sometimes men have two and twentie, three and twentie, and sometimes againe eight and twentie, nine and twentie, and thirtie fathome, all black mingled ground, sometimes stones so great as pease, of coullour like black earth.

When Howbrough is northnortheast seven leagues from you, there it is 15 fathome deepe, stonie ground, from thence on northeast two leagues, there it is 20 fathome deepe, foule stonie ground. Neare about these places, so far from land that you can not see Gotland, are bancks, where it is not deeper then 12 fathome. The like uneven grounds are also thwart of the south end of Oeland, as hath beene said in the former chapter, but betwixt them both is deeper water. If you come in the farewaie from Ry to Bronthollom, betwixt the south endes of Gotland and Oeland, and must lie by with contrarie windes, when you are in the tenne or twelve fathome, and then saile towards Oeland, you shall get deeper water.

If you lie by betwixt Oeland and Reefcoll, and that Reefcoll come to be southsoutheast and south and by east from you, so farre without the land, that you cannot see it, then you shall get also the like uneven ground of tenne and twelve fathome, redde grosse stonie sand, also blackish grosse sandie stonie ground; If you be nearest to Oeland, you shall get, in the tenne or twelve fathome pittes in the tallowe, so that it seemeth, that those grounds of Oeland doe run over unto, or neare Reefcoll. The like grounds and unevenesse doe seeme to lie over the sea also from

from the south end of Gotland towards Rosehead : for when the south end of Gotland commeth to be about north from you, although it be fourteene or sixteene leagues from you, you shall finde depth of sixteen and twentie fathome soft ground, like as off from Oeland, but if Gotland be more easterlie or westerly from you, you shall have deeper water.

When you are about a league by west, the southwest point of Gotland, so that it be southeast, or eastsoutheast from you about a league, then the Karels lie about north from you, which you may even see in cleare weather, there abouts it is shold water a good waies off from the shoare. When the west point or steepe point is about north from you, a little to the eastwards or to the westwards of it, there is ten, twelve, fourteene, sixteene & eighteene fathome deepe, a great waies from the land: but when that point commeth to be northeast, eastnortheast, or east from you, there it is above the fortie fathome deepe.

Betwixt the southwest point of Gotland, and the north point of Oelandt it is also verie deepe, so that there you cannot cast ground with fortie fathome.

When you are northwest and northwest and by north about two leagues from Houbrough, there you have great redde stonie land, and black stones in it, so great as beanes.

Betwixt Gotland & the Sweeds schares in the farewaie it is foure and thirtie, six and thirtie and eight and thirtie fathome deepe, & close by Gotland five & twentie fathome.

When the tower of Houbrough is westnorthwest from you, so farre as you may see it from the poope, there it is thirtie and one and thirtie fathome deepe, but being northnorthwest from you it is sholder, five and twentie and sixe and twentie fathome.

Betwixt Houbrough & Eastergore lieth a banck of foure and twentie fathome, grosse redde sand, so farre without the land, that you cannot see the land out of the top. To the eastwards of it lieth another banck of fourteene fathome gray and white sand, when you are over it, you shall have no ground in fortie fathome.

Two leagues without the land, by west Eastergore, there it is about one and thirtie fathome soft ground.

He that saileth from Bronthollom alongst by Oelandt towards Eastergore, let him not spare his lead, but sound often for these aforesaid bancks and groundes; thereby you may well make some reckoning. If you should make reckoning to come by night with Gotlandt on the southeast side, and have no good sight, then come no nearer the land (about the north end or south end, and also by Eastergore) then in twentie or foure and twentie fathome, and so you can take no hurt by night. By day you may come neare

enough to it at many places, in seven, eight or tenne fathome.

How these places doe lie one from the other and from other lands.

From Houbrough to Eastergore northeast 12 or 13 l.
From Eastergore to Farosound north, and north & by east 7 leagues.
From Farosound to Gotschefand northnortheast & north & by east 6 or 7 leagues.
From Houbrough to the Karels north and by west 7 leag.
From the Karels to Wisbuy northeast 7 leagues.
From the Karels to Gotschefand northeast, and northeast and by north. 21 leagues.
From Houbrough to the northend of Oeland northwest & by west 12 leagues.
From the Karels to the Sweedes Ionckvrouw west, and west and by south 13 leagues.
From the Karels to the channell of Stockholme north 21 leagues.
From the Karels to Boechschaer northnortheast 40 leag.
From Gotschefand to Boechschaer northeast and by north 20 or 21 leagues.
From Gotschefand to the south point of the Alands haffe, north & by east 33 or 34 leagues.
From Gotschefand to Wttoy northeast 37 leagues.
From Gotschefand to Dagerorte northerly 27 leagues.
From Gotschefand to Derwinde southeast and by east 31 or 32 leagues.
From Eastergore to Dagerorte northeast, and northeast and by east 37 leagues.
From Eastergore to Derwinde east and by south 27 leagues.
From Eastergore to Quinsbrough deepe south and by east 50 leagues.
From Eastergore to Rosehead south and south and by west 45 leagues.
From Houbrough to Hondsorte eastnortheast northeast & by east 47 leagues.
From Houbrough to Lyserorte east & by north somewhat easterly 40 leagues.
From Houbrough to Derwinde east & by north somewhat easterly 37 leagues.
From Houbrough to Dermemell southeast and by east 40 leagues.
From Houbrough to Quinsbrough deep southsoutheast 48 leagues.
From Houbrough to Rosehead south 34 leagues.
From the north end of Gotland to Derwinda e.s.c. 29 leag.

How these lands doe shew themselves at sea.



Thus sheweth the west point or northwest point of Gotland, when you come from the southwards.



When Gotschefand is northeast from you two leagues it sheweth thus.



In this forme sheweth the land a little to the westwards of Eastergore, when that point is a great league west from you, there it is foure and twentie and five and twentie fathome deepe soft ground.



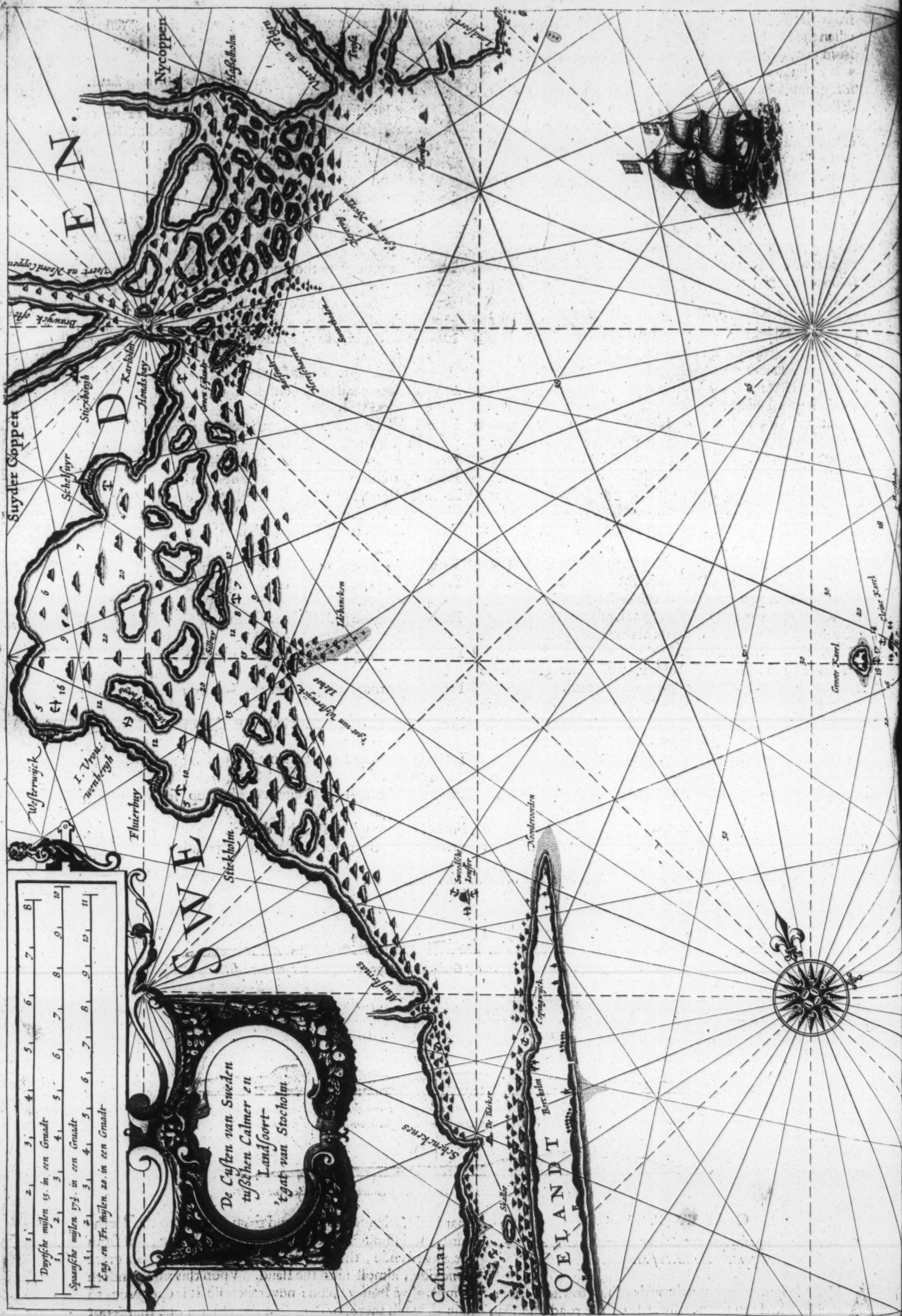
Eastergore being a league west from you sheweth thus, there it is five and twentie fathome deepe.

C H A P. X.

Of the coasts of Sweden betwixt Calmer and Landsort, and the West point of the Liet of Stockholme.

A Halfe league to the northwards of the towne Calmer, to wit, a little to the northwards of the road, lieth an Island called Skallo which you must leave on the star-

board side, when you are bound from Calmer to the northwards; it is indifferent cleane upon the west side, but from the Sweeds side, there over against it, runneth off a great stoneriffe, almost unto the Island. Upon this riffe standeth commonly a stonebeacon: neverthelesse it is dangerous to saile through there, or over that shold, for one that is not there verie well acquainted: it is also Pilots water.



Four leagues to the northwards of the Calmer, on the Sweeds side, lieth an outpoint called Schencknes, or Skeggenes, thwart of it lieth a little small Iland called the Baker; betwixt this point and Skallo it is verie uneven of depths.

About two leagues more northerly over against it on Oeland, lieth Borckholm, a little to the northwardes of it lieth Copingwyke, where men doe lade manie Toombstones, & other stones, with a northerly wind it is bad lying there.

Northwest or somewhat more westerly from Borckholm about three leagues on the Sweeds side, lieth a haven in the rockes, where men doe lade Beames, to the northwards of it, northnorthwest and northwest and by north from Borckholme lieth Munsteraas, that is a good haven also for verie great shippes.

From Calmer to the Sweeds Ioufer the course is north-northeast nine or tenne leagues, this is a round rock and verie high, you may see it alongst over Oeland, being a good waies to the eastwards of Oeland, it is not verie great, but cleane round about so that you may ancker under it on everie side in eightene and nineteene fathome, but by reason that it is not broad, there commeth in (with hard windes) a rowling sea.

From the Sweeds Ioufer to the channell of Westerwyke, or Silbuye, the course is north & by west eight leagues, but from Northeroorden the north end of Oeland north west nine leagues.

The channell of Westerwyke and Silbuy is called Ide-sound, after a great rock lying on the north side of this channell, called Ydehoe, off from it lie manie rockes, some above and some under water, two great leagues to seawards, which are called the Idebancks. He that will saile from the north end of Oeland towards the Barfound, and by bare windes, doth come a little to the westwards, without the right farewaie, must be verie carefull, and take good heed that he get not in amongst them.

For to know the channell of Westerwyke, you shall see a high bare rock, bring that northwest from you, and saile so right in; and then you shall fall with the land right before it, and then also you shall espie another barerocke, whereupon standeth a Fishers beakon, and also another to the southwards of it, with a mast, saile in betwixt the two rockes, the channell lieth in northwest and northwest and by north: when you are come within them you may saile alongst through the rockes where you desire to be, to Silbuye, Stixholm, Fluorbuy, Vrowenbergh, Westerwyke, up to the northwards to Schelsuyr and other places more, there it is all cleane ground, and 12, 15, 18, and 20 fathome deepe.

If you be bound to Silbuye, then saile up to the northwards or eastwards untill you come before the towne, and ancker there in the middest between the rockes in seven, eight and nine fathome.

If you be bound to Fleurbuy, or Vrowenbergh, then saile in west, and west and by north through the rockes till you come against the maine land; there you may ancker before Fleurbuy, or saile up northwest betwixt the Iland of Vrowenbergh & the maine land, and ancker there in twelve fathome: also you may runne through that way untill you come to Westerwyke. Westerwyke lieth from Silbuy through within the rockes west, and west and by north, there it is in the farewaie fiftene & sixtene fathome deepe.

From Silbuy to Schelsuyr it is northnorthwest seven leagues, all alongst through within the rockes. Schelsuyr is a good haven, there lieth a rocke in the havens mouth, about which you may runne in on both sides, and ancker before the towne.

To the eastwards of Schelsuyr lieth the Hondtsbay and the Green Iland, there it is also good anckering. You may run from Silbuy alongst by it untill you come in the Sound of Southercoppen and Northcoppen.

From the channell of Westerwyke to the Barfound, the coast lieth alongst by the rockes north & by east eight leagues. But from the north end of Oeland to the Barfound the course is north and by west 16 leagues, go not more westerly, that you get not into the suncken rockes and fowle grounds of the Idebancks.

The north end of Oeland runneth somewhat farre off flat. If you runne out close by Oeland, saile on north & by west, then you runne alongst farre enough without the Idebanks, and so shall fall with the land about a halfe league to the southwards of Barfound against a deale of low out-rockes. It seemeth a farre of (by reason of the multitude of rockes and little Ilands) to be all firme land, but comming neare it, it is all broken. You shall see there also an Iland by which there seemeth to be a channell, but you must be further to the northwards, runne alongst by the coast in seven fathome, so long untill that you see out a head high out-rockes, these shall be the Heerscharen which are verie fowle, and lie off from the north point of the channell, a good waies east-southeast into sea, all which you must leave on the starboard side, and runne alongst by them unto the channell. When as you come out of the sea, you must take verie good heed that you fall not with the land to the northwards of the channell, that you doe not get into the foresaid Heerscharen. When you come before the channell, you shall see two Sounds or goings in, the southermost seemeth to be the broadest and fairest, but the northermost is farre the best and lieth in northnorthwest. On the north side of the channell lieth a great rock with a beakon upon it, and somewhat more to the northwards sheweth a round hill, by all which marks this channell is verie good to be knowne. When you are right before the norther channell, and doe see open into it, then saile in northnorthwest; being come in about a shot of a cast peece, you shall see on the larboard side two little low Ilands, ancker within them in 17 or 18 fathome, there you must hire a Pylot to bring you up; either to Southercoppen or Northercoppen where you desire to be, it is Pylots water, it is from thence to Southercoppen about ten leagues, but to Northercoppen 18 leagues. In the comming in of the Sound is good ancker ground in tenne fathome. Within in the Sound it is broad and wide, and all over good anckering in 18 and 20 fathome.

About an English mile within the Sound, you leave (in sailing up) the Taldersound on the larboard side, there is no more then six or seven foot water, from thence you edge up north and also northeast a half league, then again west and by south about two leagues, afterwards westnorthwest a league unto Karholm, which is a Gentlemans house with a mill. From Karholm to Stickbrough it is further west about two leagues, that is a castle upon a little Iland, you must goe about to the southwards of it through a bridge.

From Stickbrough saile up alongst the Sound, and leave most of all the rockes (which you see) on the larboard side, except one or two a little above Stickbrough, leave them on the starboard side. About two leagues past Stickbrough standeth a Gentlemans house called Mem, there is the place where men doe lade, a halfe league from Southercopping.

For to saile from without the Northercopping, you must runne in by the Swartboden up westwards unto Schenes & Braburch & alongst unto the Brawyke the sound of Northcopping, or els you must come in at the Barfound through within the rockes into the Brawyke unto Northercopping, but it is not to be done without a Pilot for them that are not there verie well acquainted, for it is Pilots water.

From the north end of Oeland to the channell Nycopping by the Hevering, the course is due north about on and twentie leagues, but if you runne close alongst by the end of Oeland, you shall fall with the land a little to the westwardes of the Hevering. The Hevering is a great reddish bare rock whereupon stand 3 or 4 Fishers beacons, heretofore there was wont to stand upon it a barrell upon a mast, which men might see farre off at sea, but it is taken off in the last warres between the Kings of Sweden & Denmark, now there standeth nothing upon it but some Warders.

Two great leagues to the westwards of the Hevering, to wit, westsouthwest from it, lie the foresaid rockes called the Swartboden, which are great rockes, and are sometimes mistaken for the Hevering, you may saile in also by these Swartboden, and runne through within Oxelen & the other rockes, and come by the point of the Hommelwyke into the right sound of Nycoppen.

When

When you come before the channell of the Hevering, you can at first hardly see a channell, or any opening, but bring the great rock the Hevering northwest from you, and saile so right in, & runne in close alongst to the northwards of it. In the sailing in you shall see two channells, the northernmost is within full of dangers, so that you cannot goe through there. The right channell by the Hevering is so narrow, that you can hardly turne to and againe there.

From the Hevering you must saile in first northwest a league and halfe, or two leagues unto a great rock, leave it on the starboard side, and saile about by it, and goe in along northwest and by north. A little within the foresaid great rock, thwart of the point of the Hommelwyke, you shall find also a great rock on the starboard side, you may runne about to the westwards of it, untill you come within the other rockes and little Ilands, and ancker there in three fathome soft ground: but if you will ancker there, then you must shun somewhat the west end of the great Holm, because of a suncken rock that lieth even without the point of the rock. From that foresaid road unto Hassell-holm the course is yet in alongst northwest and by north; but with shippes of great draught you must ancker before the channell of Hassell-holme. From the Hevering to the Hassell-holme it is in all about three or four leagues.

Hommel-
wyke.

Hassellholme.

From Hassell-holm alongst upwards through the stone-reach, it is not deeper then nine foot, you must also (if you wil saile up there) first set the rockes, or suncken rockes with beakons with your boat, or else you shold sometimes saile upon some of the rockes in seven foot depth. The narrowest of the Stonereach is thwart of an Iland which you must leave on the starboard side, off from which lieth a suncken rock in the narrow, you must goe close alongst by the suncken rock, for to the westwardes of it is verie shold water. Being past this stonie ground, you shall get also ground, where is not deeper then sixe foot; being come over that by the towne Nycopping, it is againe eight foot deepe, but stonie ground. The shippes lie without the towne, thwart of the beakons over against the castle, which lieth on the west side of the river.

Stonereach.

Nycopping.

From Hassell-holm to the towne Nycopping it is about a league first up north and by west, and afterwards west. For one that is unacquainted, it is not well to saile up, it is also Pilots water, so soone as you come within the channell, you can get a Pilot to bring you where you desire to be.

From Nycopping you may saile alongst through the rocks to the northwards of Hassell-holm unto Trofa and Telghen.

Landsoort.

Landsoort (which is the west point of the Liet of Stockholm) lieth from the Hevering eastnortheast distant 7 or 8 leagues.

Hartfoe.

Heyrhammer.

About halfe waies betwixt both, lieth a great high rock verie good to be knowne, a good waies without the land alone, called Hartfoe, and a little league to the westwards of Landsoort lie also some foule out-rockes called the Heyrhammer. When as you sail from the Hevering on eastnortheast, then you runne alongst a little without the Hartfoe, leaving it on the larboard side. With that course, you cannot also saile too neere the Heyrhammer, & then you leave it lying also on the larboard side towards the land.

The land to the westwardes of Landsoort lieth west, or west & by south, with divers great rockes and havens where you may saile into. About a league to the westwardes of it lieth a haven within a low rock in betwixt two other low rockes, there you must make you fast with kables on both shoares, and with an ancker in the Sound. Before the havens mouth lieth high a round rock, which shooteth the havens mouth.

A little to the westwards of Hartfoe goeth in a haven or deepe, where you may runne through with Barkes within Elsnap unto Stockholm.

A little to the westwards of that deepe lieth the Sound of Telghen lying in northwest, almost unto the great Lack de Meller, upon the end of that Sound lieth Telghen, but at the mouth of the Sound lieth the little towne Trofa.

About an English mile southwest from the point of Land-

soort, lie two rockes even with the water; and within these rockes close by Landsoort lieth a suncken rock. He that commeth from the southwards, being bound to Stockholm, & falleth with the land to the westwards of the point of Landsoort, must take heed of them; you may saile within these two rockes (lying even with the water) to wit, betwixt them and the foresaid suncken rock, and also (as the Pilots say) you may saile through within the suncken rock, that is, betwixt the suncken rock and the maine land.

Landsoort and the north point of Oeland lie southsouthwest and northnortheast distant three and twentie or foure and twentie leagues. If you saile on northnortheast from the north end of Oeland, you shall fall with the land right with Landsoort, or a little to the eastwards of it. It is better to fall with the land somewhat to the westwards of it, then to the eastwards of it, to the westwards the land is better to be knowne then the rockes to the eastwards of it. Therefore when as you will saile from the north end of Oeland to Stockholm, especially in darke weather, goe on somewhat more northerly then northnortheast, or north and by east, and then you shall runne in sight of the foresaid rock Hartfoe, which is good to be knowne.

How these places doe lie one from the other.

From Calmer to Sceggenes northnortheast 4 leagues.
From Sceggenes to the Sweedes Ioufer northnortheast 7 leagues.

From the Swedes Ioufer to Idesound the channell of Westerwyke, or Silbuy north & by west, somewhat westerly 8 leagues.

From the Swedes Ioufer to Northeroorden the north end of Oeland east and by north 3 or 4 leagues.

From Northeroorden to the channell of Westerwyke northwest 9 leagues.

From Northeroorden to the Barfound, north and by west 16 leagues.

From Northeroorden to the Hevering, or the channell of Nycopping north 21 leagues.

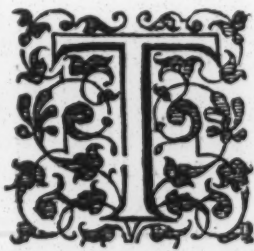
From Northeroorden to Hartfoe north & by east 23 leag.

From Northeroorden to Landsoort northnortheast 23 or 24 leagues.

From Hevering to Landsoort eastnortheast 7 or 8 leagues.

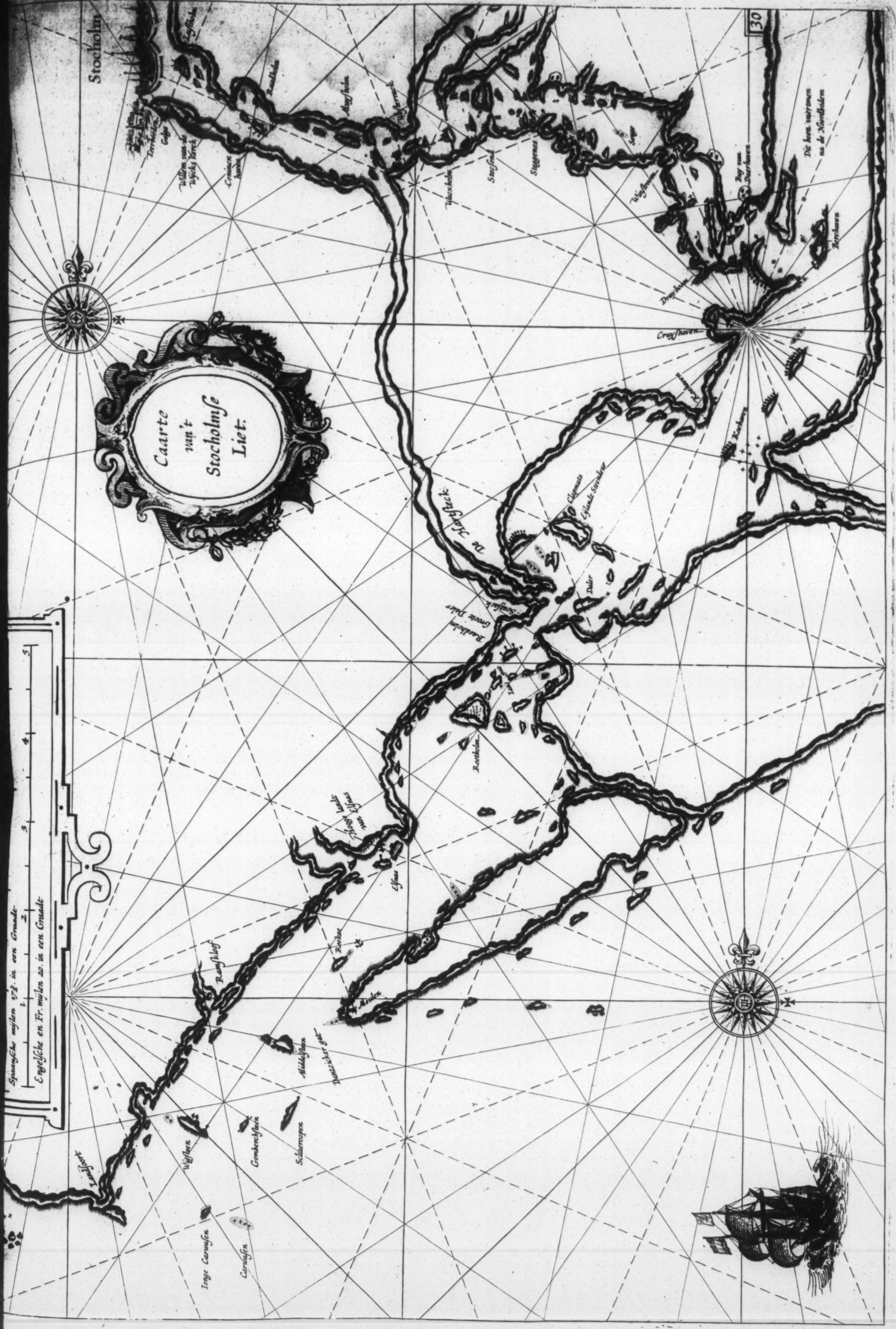
C H A P. XI.

How men shall saile up the Liet of Stockholme.



THE Liet of Stockholme goeth in north east by the point of Landsoort. About a league east from the point lie some black rockes, some above and some under water, called the Karwasen. Betwixt them & the point, about once so neare the Karwasen, as the point, lieth another black rock, not great, called the young Karwasen, betwixt that rock and the point of Landsoort, men doe saile into the channell of Stockholm. Close to the point lieth also a little Iland which you must leave on the larboard side, and runne alongst to the eastwards of it, a league northeast from the point lieth the Wigstone, lying southeast or eastsoutheast thwart off from the shoare. This is somewhat a long rock with three hommocks, the two westernmost are the greatest, and shew like a saddle, the easternmost hommock is the smallest, upon it standeth a little walled cape, you must saile alongst to the eastwards of it, an leave the rock on the larboard side. You may well saile also about to the westwards of this Wigstone, it is cleane round about, but on the west side it is narrowest, betwixt it and the land lieth also a rock, with a little rock off from it which you must avoid.

A league northeast from the Wigstone lieth the Middlestone, which is a great high rock with a great clift or saddle, with another great rock a little to the westwards of it: you cannot saile through betwixt them, they are fast one to the other with rockes. In sailing up men leave this Middlestone on the



Caarte
van't
Stocholm'se
Liet.

Spanysche mijlen 17½ in een Graad
Engelsche en Fr. mijlen 20 in een Graad

on the starboard side, and runne about to the westwardes of it.

Gomberg-
stone.

From by east the Wigstone to the Middlestone, to wit, alongst to the westwardes of it the course is northnortheast. About a great English mile east from the Wigstone, and north from the Karwasen lieth another rock called the Gombergstone, and to the eastwardes of it another called Schaeropen. When you saile from the Wigstone to the Middlestone, you leave them both on the starboard side.

Ramsloof.

Danske
channell.

Thwart of the Middlestone, on the Westland lieth the haven of Ramsloof, there you may ancker within the rockes. The Middlestone lieth about a half league southwest from the east point of the Liet, to wit, from the east point of the maine land, or the Swedes schares: betwixt them both goeth in a channell called the Danske channell. For to saile in there, you must avoid the foresaid east point a good waies off (whereupon standeth a mill) and runne in by the Middlestone, for from that point runneth off a great ledge of rockes a good waies to seawardes, towards the Middlestone. From by west the Middlestone to Elsnap the course is northeast three leagues. When you are a little past the Middlestone, you come in betwixt the two lands, and a little within the east point you shall meet with a rock

Reed Cow.

Elsnap.

in the farewaie called the Reed Cow. You may saile about it on both sides, but men leave it commonly on the starboard side, within that rock, that is on the north side you may ancker. Elsnap is a haven behind two little Ilands, where the Kings shippes of warre do commonly lie to tarry for a winde, when they are bound to sea, there it is verie good lying, when with contrarie windes you can neither get up nor downe, you can come in and out there both from the northwardes and from the southwardes verie conveniently. Comming from the southwardes you can see over the southermost little Iland, the masts of the ships that lie behind it. For to saile in there behind it, runne in about by the south point of the Ilands Elsnap behind it, and then you leave a little black rocke on the south side of the havens mouth, lying on the larboard side. Betwixt the two little Ilands of Elsnap runnes also a channell through where you may go through with Huyes & small shippes. From thwart of Elsnap the course is inwards northnortheast about two

Redholm.

S. Johns
channell.

leagues to the Redholm, that is a great red round rock growne full of trees, to the eastwardes of it lieth another smaller bare rock, the farewaie is there in through betwixt them, and about a musket shot broad. In this narrow it is all over good ancker ground. From the north end of the Redholm lieth off a great row of rockes unto the east shoare of the Liet, where you must saile through. When as you saile through betwixt the Redholm and the foresaid bare rock to the eastwardes of it, go then on yet about an English mile further northnortheast untill you come thwart of the fourth channell to tell off from the Redholm which lieth through the foresaid row of rockes to the northwardes of the Redholm, that is called S. Johns channell, it lieth through about northnorthwest or somewhat more northerly, it is a short Inlet, runne through there. Being through S. Johns channell, go again northnortheast about an English mile to

Raedholm.

Great
Daler.

Saltack.

Little
Daler.

the Raedhollom, which is along rock upon it stand three barrels upon masts, this you must leave on the larboard side, and runne alongst to the eastwardes of it. From the north point of that Redholme runneth of a little riffe, or showld, which you must avoid. From the Redholme unto the great Daler the course is northwest and by north, that is a haven on the west side of the Liet, there lieth a churchyard within on the land; where the flain Poles people in the last Polish wars lie buried. Thwart of that Churchyard is a sandbay, there is good ancker ground, like as is all over in that foresaid haven. At the north point of the haven the great Daler lieth a suncken rock close by the land, called the sack, upon which is no more then nine foot water. From the great Daler the course is alongst northeast a halfe league unto the little Daler, which is a high steepe rocke, the highest that you find amongst all the rockes in the Liet, runne alongst to the westwardes of it, and leave it on the starboard side. Over against it on the west side lieth another rock, which is called

also the Daler, to the westwardes of it, to wit betwixt that rock and the maine land, is also an opening, where you may saile through. A little within that foresaid rock on the west land goeth in the Hartstick which is a Sound that lieth in first west, and west and by north, a good waies in, and then northwest and commeth into the Liet to the northwardes of Waxholm, by Kingshaven. The Kings Maiesty hath caused to sinke some shippes in the mouth of the Sound, so that men cannot goe through there with great shippes, but onely with little barks. From the little Daler the course is northnorthwest, about a half league to Steendeur, a great Iland which you must leave on the starboard side, & runne close along by it, and so you shall leave a round rock to the southwardes over against it on the larboard side, and saile through betwixt them: this channell lieth through north-west. At the west end of the great Iland Steendeur lieth a little black rock, you must runne about by it againe to the eastwardes.

From Steendeur to Kow-haven the course is eastnorth-east two leagues, that is a rock lying in the broad Sound, leave it on the starboard side, and saile to the westwardes of it alongst by the west land unto Berckhaven. Betwixt both about half waies lieth a haven called the Crossehaven, there it is good lying for west & northwest winds.

Berckhaven lieth from Cow-haven northeast & by north distant about two leagues: this is a haven betwixt two Ilands where is good anckering for all winds, as well for them which come from Stockholm, and desire to saile to the Northbodem, as also for them that wil saile off towards Landsoort, there is (like as at most places betwixt the rocks and Ilands) good clay ground. When you come from Kow-haven, and are bound to Stockholm, you must leave these two Ilands of Berckhaven on the starboard side, and runne in about betwixt them and the point of the maine land. From the narrow betwixt Berckhaven & the foresaid point to Duerhaven, the course is northwest about a halfe league. On the southwest side of that farewaie thwart of the point over against Duerhaven, lie two suncken rocks, on each side of the point one, the one on the northwest side, & the other on the southeast side, commonly there standeth upon each of them a little tree for a beakon.

From the point of Duerhaven unto the Draybome the course is southwest and by west somewhat westerly about a halfe league, it is called also the Duerhaven, off from the point within the Ilands untill you come before the buye, alongst there, and also within the Ilands, it is good lying everie where.

The little Ilands which lie in the channell of the Draybome, you must leave them on the starboard side of you.

From the Dray-bome to the Windstreame the course is first north, & north & by west untill about half waies, there you shall find a little Iland with a little tree, leave that on the larboard side, and goe from thence in northnorthwest to the Windstream. In the Windstream is good anckering by the shoare, except in the north end of the streame, there is no ancker ground. From the Dray-bome to the Windstreame it is about a league distance.

From the Windstreame to the Seugh the course is west-northwest a halfe league, that is a chundle or stone-banck even with the water, runne alongst to the northwardes of it, and leave it on the larboard.

From the Seugh to Scheggen the course is west and by north a league, runne alongst there by the south shoare. When you come against Scheggen, you shall see upon the point of the south shoare a little round tree, over against that little tree somewhat more northerly then in the middle of the channell, lieth a suncken rock, for to avoid it you must runne nearest the south shoare. The reach of Scheggen lieth through west, and west and by south about an English mile, it is narrow, but hath everie where ancker ground.

From Scheggen the course is westsouthwest an English mile to Steckfound, or west to Kings-deep, the little Ilands on the starboard side as you saile to Steckfound, are cleane round about, so that you may goe on all sides about by them. Comming close to Steckfound you shall find a sun-

ken

ken rock a little by South the farewaie. The Steckfound lieth through Southsouthwest it is a short In-let about a cables length long.

From Steckfound unto Waxholm it is Southwest westerly about an English mile. Vpon Waxholm standeth the Kings castle, there all the shippes are visited whether they go up or downe, the channell there by it, is paled too so neare, that they can shut it with a barre.

From Waxholm to the Wester reach the course is west-southwest and through the Wester-reach southwest. From thence alongst west to Eeldam, that is a verie narrow channell a little more then a ships length broad.

From Eeldam the course is west to Mouse-holm, which is about a league from Waxholm, men leave the high rough Mouse-holm on the starboard side, and runne alongst by it to the southwards.

From the Mouse-holm to Kings-haven it is a league west, and west and by north all alongst by the southland.

From Kings-haven unto the town Stockholme the course is northwest, and northwest and by west also a league distance alongst by the shoare. When you come before the towne, you may ancker where you please.

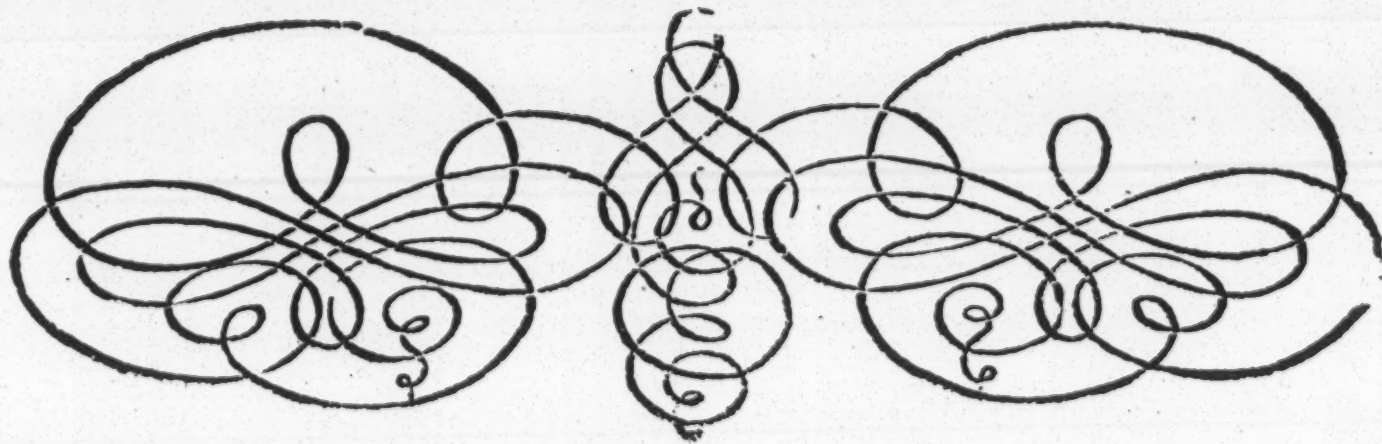
He that falleth to leewards, or by any other accident cannot come by Landsoort into the Liet of Stockholme, he may saile in more to the northwards through divers channells.

Amongst others there is one where men may saile into, and come by the great Daler into the Liet: there goeth another in by Berckhaven into the Liet. The knowledge of this channell is a verie high rock, with another that is not so high, thereby to the southwards of it, betwixt these two rockes goeth in this channell, it is verie narrow in the coming in, not above two shippes lengths broad. So soon as you come in within these rockes, you may edge up about by the lowest, which is the souther most, and ancker under it in verie good ancker ground.

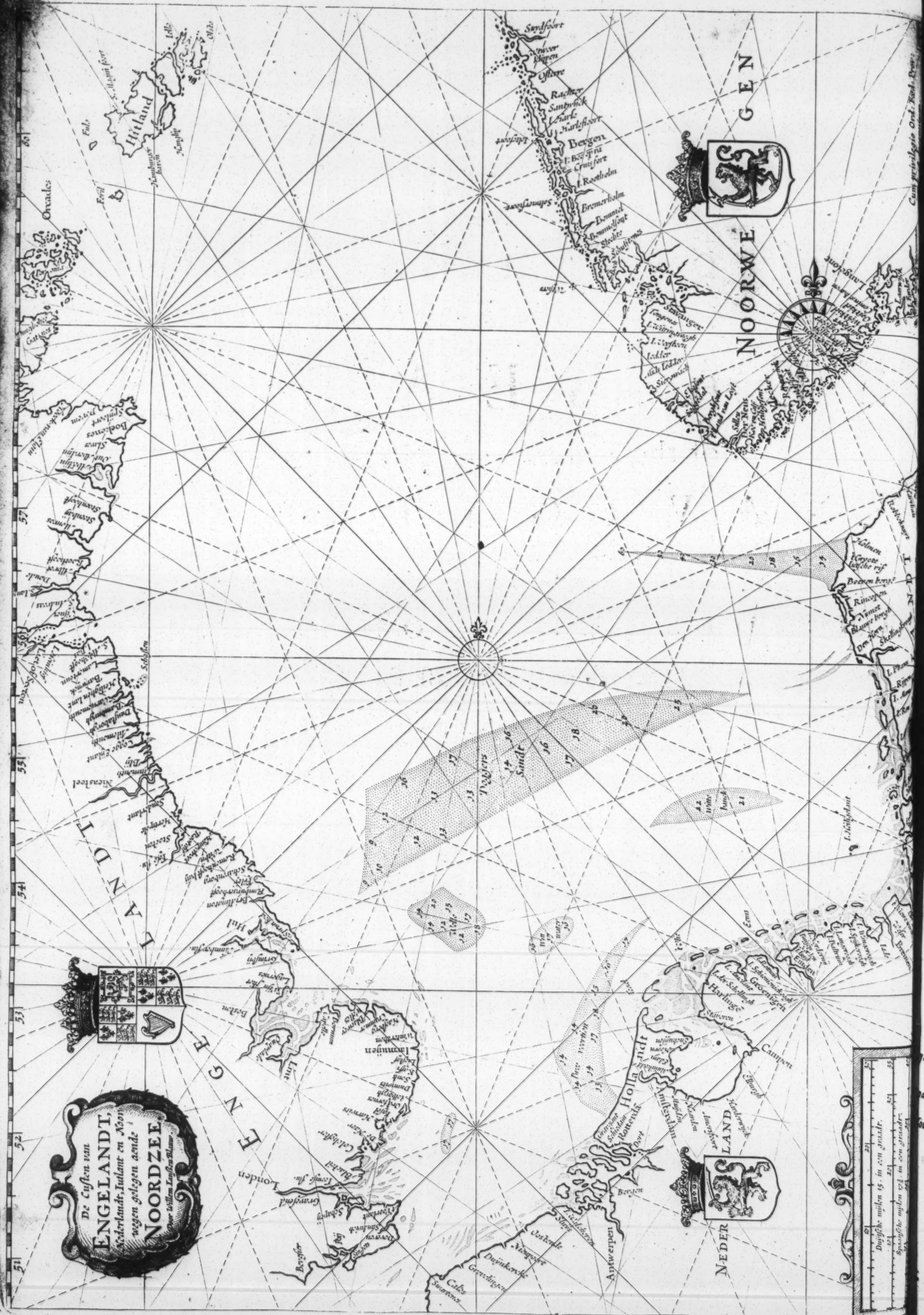
From that road in the Swedes sands the Sound goeth up first about northwest and by north, and northwest five leagues unto Berckerhaven into the Liet of Stockholme. This is a verie good channell as wel for to saile in as out, but because it is not easie to know, comming in out of the sea, it is seldom used.

To the southwards or the westwards of these two foresaid rocks, at the coming in of this channell it is all low land. If you come from the southwards, and runne alongst by that low land, so long untill that you begin to get the high land, you shall also run in sight of these two foresaid hommocks. About a league to seawards from them, lie three or four small rocks: for to saile in there you must leave them on the starboard side, and in sailing out on the larboard side.

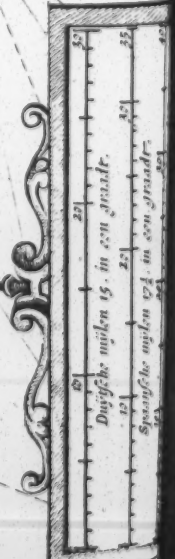
The end of the third Booke.



The second part
F O V R T H B O O K E
of the
S E A - B - E A C O N
of the Easterne and Northerne
N A V I G A T I O N,
Containing
T H E D E S C R I P T I O N O F T H E
Seacoastes of the East side of
England & Scotland.



DE CUYSEN VAN
ENGELANDT
Nederlant, Iulant en Noor
wegen gelegen aende
NOORDZEE
Door Willem Langen Blauw



Cum privilegio Ord. East. Rom.

THE FORTH BOOKE

of the

EASTERNE AND NORTHERNE NAVIGATION,

Conteyning the Description of the Coasts of the East side
of England and Scotland.

C H A P. I.

For to saile up into the River of London.

BY two wayes men may saile into the river of London, from the southwards alongst by the north Forland, and from the Northwards alongst by the Naes. If you will saile in there from the southwards, then you must first shun the North Forland, it is there shold a good wayes from the shoare, bring the north Forland also not more southerly from you then southwest, that you do not run on against the North-grounds, which ly farre to seawards. Comming by the land, run alongst by it, but come not so neere it, that you leese sight of the spyre of the steeple of Margat behind the land, for then you should come too neere it; but if you keepe so far from the shoare, that you can see the foresaid steeple above the high land, or keep it even in your sight, then you cannot take hurt of the south grounds. Comming thwart of Margat, then you are past the foresaid showlds or south grounds. Run then boldly towards the shoare, & within two cables lengths alongst by it, for to avoid the north grounds, which ly farre to the southwards towards the land. Saile on so west all alongst by the shoare, untill that the Roculvers (which are two steeples upon one church) come one in the other, and then you shall run in sight of the first buye upon the Lafts, which lieth upon the foresaid markes of the Roculvers, being by it you can also see the other buye which lieth like as the first also on the north side, and over against it on the south side standeth a beakon, there you must saile through betwixt them both, leaving the buye on the starboard side, and the beakon over against it on the larboard side. From thence you may with little shippes, or shippes of little draught, but not with ships of great draught, at high water run over the Swallow on westnorthwest towards Sheppy, for it is there shold water, with ships of great draught you must runne through the Fishers deepe towards Blacke-taile. You may also runne from Margat with small shippes alongst by the shoare upon the lead at high water even unto Sheppy, but in sailing alongst there you must cast your tydes well, for the flood falleth very strong into the Swallow, and the ebbe to the contrary very strong out.

When you come by Sheppy, runne within two cables lengths alongst by it, for to avoid the taile of the Spaniard, untill that you be past Quinsbrough, edge then off from the south shoare for to avoid the Noere, which is a sand that shooteth off from the south point of the river a good wayes to the eastwards, upon the outermost end whereof standeth alwayes a beakon, whereby you may know it. Run alongst to the northwards of it, leaving it on the larboard side, and alongst in the middle of the channell into the sea-reach for to avoid the grounds which ly off from the north shoare, goe in so alongst towards Gravesend.

To saile with shippes of great draughts alongst by the north Forland up into the Thames, you must (when you are past the buyes upon the Lafts) saile through the Fishers deep, toward Black-taile, which lieth from the second buye

upon the Lafts, unto the first buye in the fishers deepe north-west and northwest and by west, which lieth upon the north side of the sand, which men doe call the Spaniard, these two buyes lie a great wayes one from the other.

Sailing from the buye upon the Lafts it is a great wayes all shold water, so that you must runne over there with high water, but comming neare the buye upon the Spaniard, it is by little and little deeper water. Hee that will saile over heere, must reckon his tides well, the flood falleth there alongst towards the southwest almost thwart over the deepe, and the ebbe to the contrary.

The second buye in the Fishers Deepe you must leave on the starboard side, and the buye upon the Spaniard on the larboard side: being past that, you come against the Blacke-taile, to the southwards of the Shoe-beakon into the right deepe. The east point of Sheppy shall then lie about south from you. From the Shoe-beakon the course is southwest to the point of Black-taile, there runneth off a hooke which men might (at unawares) sail within (comming from the northwards) in five or fixe fathome, but if you keep from the shoare in seven fathome, you cannot saile within it. From Blacke-taile to the beakon upon the Noere, the course is westsouthwest, leave it on the larboard side, as before is said, and runne in alongst the river, in the middle of the channell betwixt both lands unto Gravesend.

For to saile into the river of London comming from the northwards, you must come neere the coast to the northwards of Orfordnes, which is to the northwards of all the sands, there lie Albrough, Dunwich, Walderfwike, Sowle and Covehit, all betwixt Orfordnes and Leystaff. Covehit is a sharp steeple like as also Leystaffe, but Sowle and Walderfwike, Albrough and Orfordnes are all flat steeples. Sowle & Dunwich ly both upon the high land, betwixt them both is a valley, therein you may see Walderfwike when you are thwart of it. Dunwich is the best to be knowne of all these foresaid places: it hath two flat steeples, & on both sides some trees. To the southwards of it lieth Albrough which is also very good to be knowne, it hath one high flat steeple with three mills, the two stand to the northwards, & the third to the southwards of Albrough when you are thwart of it, but sailing to the southwards, they come at last all three to the southwards of it. The land without Albrough, and to the southwards of it is verie low flat & chindely land.

Betwixt Albrough & Dunwich about half wayes betwixt them, lieth a Wood which is at both ends high, and in the middest low with a saddle; this you shall commonly see first when you fall with the land thereabouts, and is the best to be knowne for to know the coast by; the land without it, & to the southwards is very low flat chindely land. About two leagues to the southwards of Albrough lieth Orfordnes, betwixt them both stand also two woods of trees, which shew themselves a farre of like castles or towers. Orfordnes is a flat steeple, with a thick or broad castle, which hath also a thick flat steeple, almost of fashion like the steeple of Rarop open above with holes in it like Bell-holes.

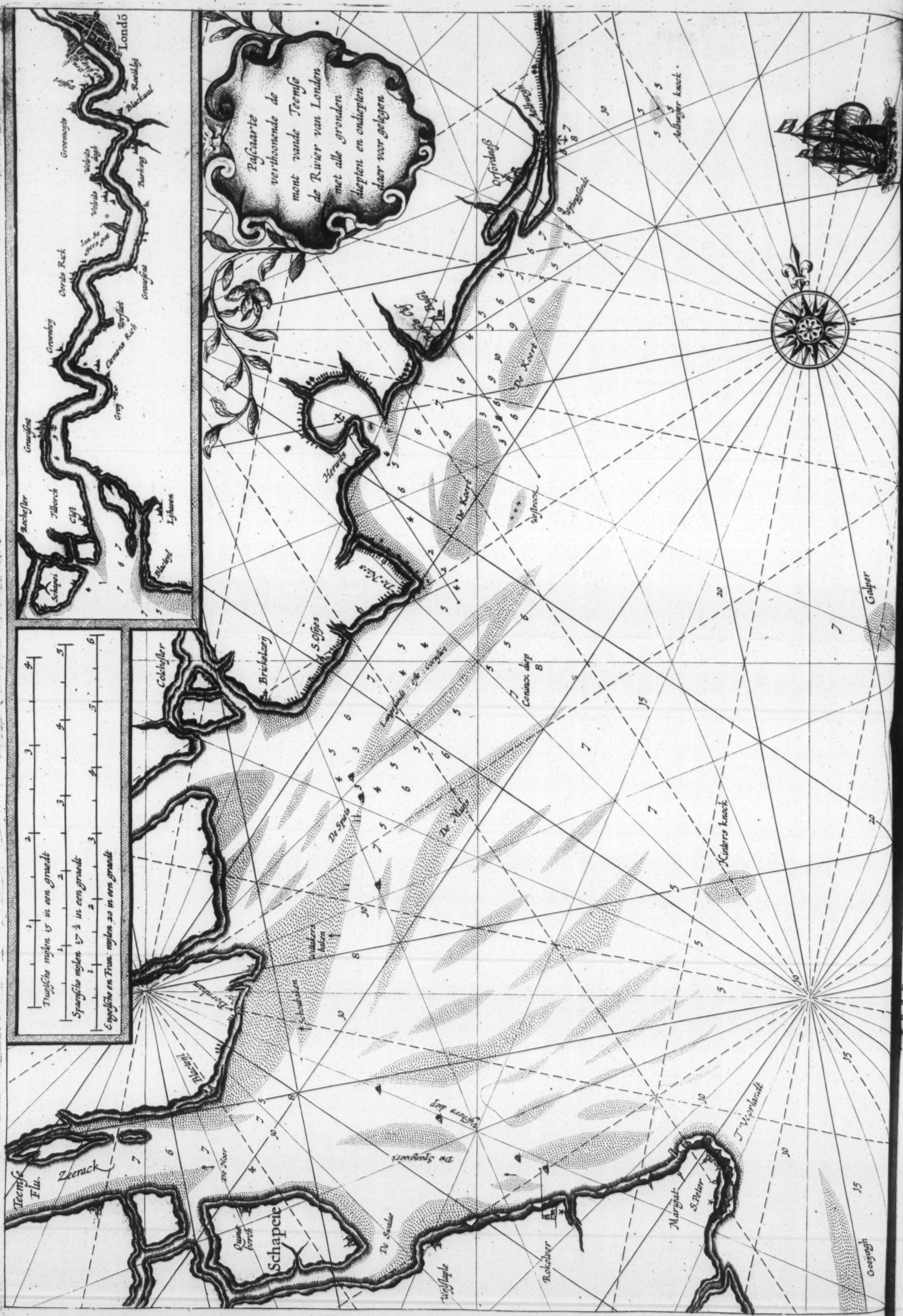
Before Dunwich you may anker, there is good lying in 8 or 9 fathome some what soft ground. Before Albrough is the best road of all the coast thereabouts in 6 & 7 fathome.

Ealt

*For to saile
into the
river of
London
from the
north-
wards,
Sowle.
Dunwich.*

Albrough.

Orfordnes.



Pascarte
verhoonende de
mont vande Teemse
de Rivier van Londen
met alle gronden
diepten en ondiepten
daer voor gelegen

Duytsche mijlen 15 in een graadt
Spaensche mijlen 17 1/2 in een graadt
Engelsche en Fran. mijlen 20 in een graadt

East from Aelbrough about two leagues lieth Aelbrough Knock, this is a sand which at low water is not deeper then seven or eight foot: you may sound round about it in five fathom, but it is not good to come nearer it. With sea windes you may discern it plainly by the breaking of the sea upon it; but with landerly or westerly windes, and faire weather, the sea breaketh not upon it, hee that runneth thereby to the northwardes with a ebbe, shal see it commonly ripple very much upon it, like as upon most of the English banks, and not indeed upon the bankes, but against them, for upon the showdest or middest of the banckes is alwayes the smoothest water, like as you finde every where.

When as Aelbrough is west from you, & the two steeples of Orfordnes are one in the other, there you shal finde Aelbrough Knock. These are sure marks of that sand.

The Whiting, or Whiting sand, is somewhat a long small sand lying before Orfordnes, and the chindely land to the southwardes of Aelbrough, and lieth alongst the reach, but the south end lieth further from land then the north end, there is at low water not above six or seven foot water upon it. Comming from the northwardes, men saile commonly to the westwardes of it, that is through betwixt the land & Whiting sand, towards the Naze. Men may also saile alongst to the eastwardes of it, through betwixt Whiting sand and the eastermost point of the Court, or Courtland, which some doe call the Rib.

The north end of the Whiting lieth alongst close to the shoare, and lieth from the steeples of Orfordnes southeast and by south, it is so exceeding steepe and needle too, that you shall have the one cast nine, the next cast five fathom, and then you are no more but a ships length from it, before you can have the lead againe you should be upon it. When as you sit with the foreship against it, it is at the stearne five or sixe fathom deepe.

Alongst the Inner side it is also every where so steepe, that you cannot sound it, but on the outer side you may runne alongst by it in five fathome upon the lead, untill you come within the sands.

When as you come from the northwardes and wil saile through within the Whiting, you must runne close alongst by the shoare, and southwest about by the point of the Chindle to the southwardes of Aelbrough, untill you come within the north point of the Whyting, when the steeples of Orfordnes come to be northwest & by north from you, then you are right thwart of the north point of the Whyting, being within it goe againe more southerly, to wit, southwest and by south towards Balfy cliffe.

If you should fall to the southwardes of Whyting, or els comming from the southwardes will saile in there to the northwardes, then bring the steeples of Orfordnes west-northwest or northwest and by west, but for all not more northerly then northwest from you, and saile so right in untill you come by the Chindle strand, then run in alongst by it, as is before said, and then you shal run far enough alongst to the northwardes of the Whyting.

If you will saile in to the eastwardes or the southwardes of the Whyting, then bring the steeples of Orfordnes north-northwest, or northwest and by north, or northwest from you, & saile in so right with them, untill that the wood of trees, that standeth upon the next point to the southwardes of Balfy cliffe, come to Balfy cliffe, which shall then stand about westsouthwest from you, keepe that a foresaid wood to the south side of the cliffe, and saile in bouldly right with it, and then you shal runne right in the farewaie, in betwixt the Whyting, and the tayle of Court-sand: but if you bring the foresaid trees more then a handspikes length without the cliffe, you shall not saile to runne on against the point of the Court. That foresaid wood of trees is verie good to be known, because there abouts stand no other trees.

Or bring the steeple of Balfy westsouthwest from you, & saile in so right with it, untill you come by Whyting sand, in five or sixe fathome, and lead it in so by it upon the lead, untill that you come by Balfy, or that you get deeper water.

When you come neare Balfy, whether you be come in

from the northwardes, or the southwardes of Whyting sand, you must keepe somewhat off from the shoare, because of a little riffe or small tayle, that shooteth off from the shoare, thwart of Balfy cliffe, which you must avoid somewhat, with shippes of great draughts, there remayneth at lowe water upon it no more then two fathome, you may commonly perceive it well by the rippeling of the tyde.

You may also saile in to the southwardes of the Ribbe (that is, the tayle of the Court or Court-sand) thus: Bring the steeple of Balfy northnorthwest, or a little more northerly from you, and saile in so right with it, and so you shal runne in to the northwardes, or through the Court, at a channell of eight fathome depth, the east side of this channell is steepe, come no nearer it then eight fathome, but by the west side you may runne in about by the Court, upon the lead, untill you come within the sands.

Balfy hath a high flatte steeple, & lieth somewhat within the land behind the cliffe, when as you come from the northwardes, you may see Balfy to the northwardes or the westwardes of the cliffe, but you saile it altogether behind the cliffe, so that at last it commeth out againe to the southwardes of it.

If you will saile to Harwich being past Balfy, then bring Balfy to that steep point to the southwardes of Balfy, where the trees stand upon, keepe these markes so standing, and runne so alongst by the shoare, untill that you be over the point of the Chindle, the markes there of are two high trees within the land, when they are about northnorthwest from you, then they come one in the other with the steeple of Harwich, and then you are right over the point of the Chindle, & then you shall get deeper water, to wit foure & five fathome, or somewhat more against the highest water. Runne in then about by the point, the channell lieth in right north, but in the midst of the havens mouth lies a funcken rocky & stony ground, which you must avoid, you may saile in about it on both sides, by the one shoare or the other, but alongst by the east shoare it is best, being within it, you cannot saile amisse, to take hurt, if you do not saile bluntly against the shoare: there you may ancker al over, where you please, before the towne, in 5, 6, & 7 fathome. You may well also goe further into the bight, there it is cleane every where. The farewaie betwixt Orfordnes or Whyting sand & the Naes lieth most southwest & by south, & is 6, 7, & 8 fathome deepe, in turning to windwardes, you may run to the shoare in 5 & 4 fathome, but close to the sands it is deeper, to wit, 8, 9, & 10 fathome, the nearer the sands the deeper water.

But for to saile from Balfy to the Naze, you must marke the steeple of Balfy, when it commeth within a capstone barres length neere to the south end of the cliffe, then keep them so standing, so long untill that the house upon the Naze come over the 2 fields, which ly on against the Highland, or come over a black head upon the sea side, saile then right in with them, untill that the steeple of Harwich come to be northnorthwest from you in the little valley of a reed cliffe, leave then the first markes, keepe the steeple of Harwich in that little valley, and goe on southsoutheast, untill that the third point of the Naze come without the two other points, so you shall run through betwixt the Naze & the Court, there remayneth at lowe water no more then eight, tenne, and at some places twelve foot water, therefore it is not good to runne through here, unlesse that it be a quarter flood, or with a shippe of great draught at half flood, there it is very uneven of ground, rocky & stony. The point of the Naze is very stony, foule, & uneven, the nearer the shoare thwart of that point the sholder, but the nearer the Sands the deeper.

When that the third point of the Naze commeth without the two other points, of the other land, and that it doth againe beginne to deepe off, to wit, four or five fathome, then go southwest somewhat southerly, or southwest & by south, unto the buye upon Longsand. Thwart of the Naze is Longsand very steepe, so that it cannot bewell founded with the lead by them that are not there very well acquainted, but somewhat more to the southwardes, you may run

alongst by it in four fathome, and three fathome and a half, untill that you get the buy upon Longsand in sight of you. The north shoare to the southwards of the Naze is also flat, you may runne alongst by it also upon the lead, without any danger.

Buy upon Longsand and the Spits. The buy upon Longsand lieth in two fathome and a half, at half floud, you must leave it on the larboard side, and the Buye upon the Spits, on the starboard side, which lieth a little shoulder, they ly about south and by east and north & by west, a musket shot one from the other. The course betwixt the two buys is southsoutheast & northnorthwest, but you must reckon wel your tide, whether you runne through there with a floud or with an ebbe. Vpon the Spits, betwixt the two buys is at half floud at least three fathome & an half, or almost four fathome, in the right channell, a little to the southwardes of the buy upon the Spits stand two mastes above water, of a lost shippe, which are good markes. Being over the Spits, the course to Whitakers beacon is southsouthwest.

Whitakers beacon. About halfe waies betwixt them stand also two mastes more on the same west side, & over against these mastes lieth a middle plate, whereupon lieth a buy on the west side: the fareway is alongst to the westwardes of this middleplate, through betwixt that foresaid buy and the mastes.

Middle-plate. To the northwards of that foresaid Middleplate, goeth out a channell by the south side of Longsand, which you may saile out and in at, called the Kings-deepe. If you come from Whitakers beacon, past the Middleplate, so far that you get sight of the buys of Longsand or Spits, goe then bowldly, eastnortheast and northeast and by east into sea, or upon the lead alongst by Longsand, but if you should runne into sea, to the southwardes of the Middleplate, you should with an eastnortheast waie fall within the hooke of the Moufe. This Kings-deepe is a readie channell, and is used almost by all shippes for to runne out at.

Kings-deepe. For to saile into the Kings-deepe. For to runne in at this channell out of the sea, then bring the point of the Naze northwest from you, and saile in so with it, untill that you come nearer Goemflet or Longsand in five fathome, goe in then alongst by it about westsouthwest and southwest and by west, and keepe the sounding of Longsand, and so you shall not fayle to runne in sight of the buy upon the Spittes and the foresaid masts to the southwards of it.

Shoebeacon. From Whitakers beacon to the Shoebeacon the course is southsouthwest somewhat westerly, comming thwart of the Shoebeacon, then lyeth the east point of Seppy about south from you. From the Shoebeacon the course is alongst southwest to the point of Blacktayle, there runneth off a Hooke, which men might saile within comming from the northwards: but if you keepe from the shoare in seven fathom, you cannot take hurt of it, but in 5 fathom you runne within it. The like Hooke is also a little to the southwardes of the Shoebeacon, which you might unawares saile within, comming from the southwardes.

The Nore. From Blacktayle to the beacon upon the Nore, the course is westsouthwest. The Nore is a sand, lying from the south point of the maine land of the river, farre to the eastwardes, therefore leave the beacon on the larboard side, and goe on west alongst, amidst the channell into the river, betwixt both the lands, as heare before hath beene said in the description of the Fishers deepe.

Of the Depths and Showldes about these places, and in what Depths men may see the land.

Five or sixe leagues north and by east, and northnortheast from the north Forland or from Margat lieth a banck called Kentish Knock, upon it is three fathom water. Being by it you may even see the land from belowe. Five leagues northeast from this banck it is twentie fathome deepe.

Northeast and by north from the north Forland nine or tenne leagues, and about east from the Naze eight leagues into the sea, lieth a banck called the Galloper, of five, sixe and seven fathome depth.

The Westrocks is a stonie ground, lying betweene the

Court and Longsand, whereupon is no more then two fathome water at halfe floud.

Without that sand of Harwich five leagues from the Naze it is twentie, and two and twentie fathome deepe, being there you may see the land.

Thwart of Orfordnes you may see the land from below, in two and twentie fathome.

What moone maketh high water at these places.

At the North Forland a north and south moone maketh high water.

Within the Thames a south and by east moone.

Before the Thames, at Harwich and Orfordnes a south-southeast moone.

Of the falling and course of the streames about these foresaid places.

From the north Forland the floud falleth to the Rocolvers, and over the Braeckes westsouthwest and west and by south.

Without about Goodwin towards Kentish Knock the floud falleth north and by west and northnorthwest, there commeth the floud also against it from the northwardes, and meet one another by the Galloper, with verie great rippeling and noise, (where of this banck is also called the Galloper) and falleth to the westwardes into the sands and channells, and also to the eastwardes towards Flanders.

Betwixt the North Forland and Orfordnes the streame falleth without the sands south and by east, and south-southeast.

When you are to the northwards of the Galloper, then you can reckon no ebbe, then that which runneth alongst England to the northwardes, the streames fall there all alongst the coastes. To the southwardes of the Galloper the ebbe goeth to the contrarie, to the southwardes, and the floud to the northwardes.

How these lands doe ly one from the other, and from other lands.

From the North Forland to the north end of Goodwin the course is south and by east one great league.

From the North Forland to Kentish Knock northeast and by east, and northnortheast 4 or 5 leagues.

From thence to Orfordnes north 12 leagues.

From the North Forland to the Galloper northeast and by north 9 leagues.

From the Galloper to Orfordnes n. n. w. 9 or 10 leagues.

From the North Forland to the Wielings the course is east, somewhat northerly about 27 leagues.

From the North Forland to the Mase the course is east-northeast, or somewhat more easterly about 33 leagues.

From the North Forland to the Tessel or Marsdiep northeast 45 leagues.

From the Naze or Harwich to the Mase east 29 leagues.

From Orfordnes to Tessel eastnortheast 39 leagues.

Heights of these places.

The North Forland lieth in 51 degr. 25 min.
Orfordnes lieth in 52 degr. 12 min.

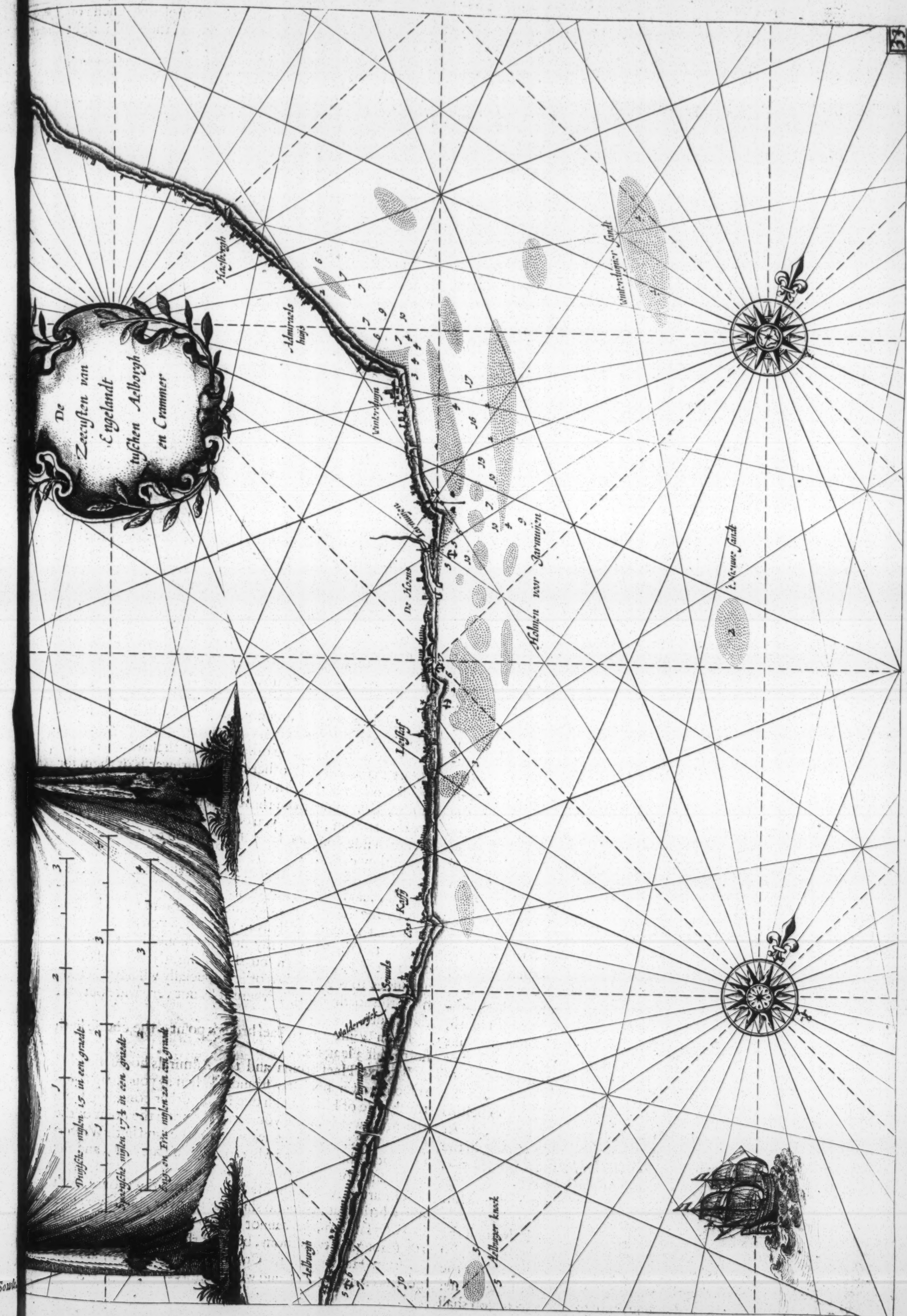
C H A P. I I.

Of the Coasts of England betweene Orfordnes and Cromer.



From Aelbrough alongst by Dunwich to Covehit the coast lieth north & by east somewhat easterly, & south and by west or somewhat westerly five leagues: but from Covehit to Leystaf north & south two leagues. Aelbrough, Dunwich and the sands lying thereabouts, are described in the former chapter.

Betwixt Dunwich and Covehit lieth the haven of Sowle, which



which is a little shold river, a little within it divideth it self into three parts, upon the northermost arme lieth Sowle, upon the middlemost Walderfwike, and upon the southermost Dunwich.

Covehit hath a high sharpe steeple, thwart of it lieth a banck not far from land, which falleth almost dry at low water, but at half flood you may saile through betwixt it & the land in 3 fathome, upon the outer side it is verie steepe, so that you cannot come nearer it then nine or ten fathom. When the steeple of Easton is w. n. w. from you, then you are to the southwards of the banck, and when the steeple of Covehit is s. w. and by w. from you, then you are to the northwards of it.

Leystaf. Two leagues to the northwards of Covehit lieth Leystaf, & two leagues more to the northwards of it lieth Yarmouth. The steeple of Leystaf is a high sharpe steeple, & standeth a great musket shot within the land from the houses, so that in failing alongst you may bring the steeple on both sides of the houses. Off from Leystaf begin the bancks or Holmes of Yarmouth, & ly alongst to the northwards past Yarmouth, untill thwart of Winterton, there go divers channels through them, which men may sail through, upon divers marks, for those that are there acquainted; you may saile through within these bancks, off from Leystaf untill past Winterton.

For to come within the bancks of Yarmouth. If you will run through from before Leystaf within these bancks, then looke out for the fire beacons which stand by Leystaf, which are two little white houses, the one standeth beneath upon the chindle on the sea side, and the Innermost upon a little hommock, somewhat farther within the land. When you come from the southwards, they shew themselves to the northwards of the towne, but come at last thwart of it. In the night there is alwaies fired upon them, for to sail in there also by night. Bring these foresaid fire beacons n. w. & by north, or somewhat more northerly from you, and saile in so right with them either by night or by day, the church of Leystaf commeth then to the southwards of the Towne over a Countrie house by the water side, when you come against the channell, there is at low water no more then 3 fathom depth, keepe these foresaid firebeacons one in the other, or bring the Innermost rather a little to the northwards of the outermost, for to avoid a little plate, which lieth on the south side of the Deepe, but the channell is indifferent wide, run on untill you come against the strand in two fathom and a half or two fathom, so near as you will or can, and go then up northwards alongst by the shoare, you shall then (being failed a little to the northwards) meet with a flat, whereupon remaineth at low water lesse then two fathome depth, with laden ships, you must ancker before that flat, and stay for high water, it floweth there about eight foot up & downe, so soone as you are over the flat it wil be 5, 6, & 7 fathom deep, edge then to the shoare, and sail toward it, and then you com before the Brewehouse, there is the road, where you may ancker in 4, 5, or 6 fathom, from thence northward toward Yarmouth alongst the shoare, is al over good anckering and good ground.

Haven of Yarmouth. About an English mile or somewhat more to the southwards of the towne Yarmouth, is the haven of Yarmouth, it hath two wooden heads, where you must saile in betwixt them both against the highest water, when the strongest of the flood is spent, at half flood it is dangerous, because of the strong tide, which should lightly carry you into the bight, against the shoare, (against your will) it is also best to run in alongst by the southerhead, there it is deepest. At Yarmouth in the road men doe commonly ancker to the northwards of the haven, right thwart of the towne, in 5, 6, 7, or 8 fathome, the nearer you ancker to the sandes the deeper water you shall have, but all good sand and soft ground.

Road before Yarmouth.

If you wil saile into the Road of Yarmouth through the Holmes, then bring the sharpe little steeple, that standeth to the northwards of Yarmouth within the land, over the broad castle, or bring the mil to the north side of the towne: keepe these marks so standing, and go in so w. n. w. you shall

find in this channell not lesse water then 8 or 9 fathome at half flood, this channell is called S. Nicholas channell: on the north side it is deepest being come in; the road is right before the towne in five and six fathome.

Thwart or over against the haven of Yarmouth goeth also a channell through the Holmes, for to sail in through there comming from the southwards, then bring Southon over the north side of the haven: the great tree betwixt Northon & that flat little house or castle, saile in right with them, and keep these marks so standing, untill that you be within the Holmes, within them lieth a plate on the starboard side, a little to the northwards of the haven called the Middleground, you may saile about it on both sides, on the inner side in 5 fathom, but towards the Holmes, or about to the eastwards of it in eight and nine fathome.

From Yarmouth to Winterton the coast lieth north and by west, and n. n. w. two leagues.

If you wil sail from Yarmouth forth through within the bancks to the northwards, sail along by the land, & keepe the founding of the shoare in 5, 6, or 7 fathome, untill that you have the two firebeacons (which stand a little to the northwards of Castor) one in the other, sail then right with them, either by day or by night, (in the night there is fired upon them) you shall so run over a flat, through betwixt two buys, which ly each of them upon a tail of a sand, sail bouldly in, within the foresaid firebeacons, untill you come againe neare the shoare, in 5 or 6 fathome, being come by the shoare, run then againe along by it, & keepe the founding thereof as before, al alongst untill you come before Winterton.

Thwart of Winterton runneth off a dangerous rif, which is dangerous to saile about by night, if men doe come too neare it, which is upon the end of steep, that (in 3 fathom or 2 fathom and a half) you shal not be a ships length off from it. But when as you (comming from the southwards) keepe your self in 6 or 7 fathome, then you cannot saile too neare to it. To the southwards of that rif upon the land, standeth a firretowre, which is vry good to be knowne, with a firebeacon, and also a little white house, when these come one in the other, then you are thwart of the point of the riffe.

To the northwards of this riffe upon the land stand two white firebeacons, whereuppon there is fired by night, for to avoid this rif. When as you come thwart of the point, then are these also one in the other, so that these doe serve for thwart marks, & the other o the southwards of them for longst marks, for those that wil saile about it from the southwards. Comming from the northwards alongst the shoare in 5 or 6 fathom, untill you come by the firebeacons upon the north side, you must keepe somewhat off from the shoare, before they come one in the other, or els you should run on against the rif. When they are one in the other then they stand s. w. and by w. from you, & when as the high firebeacon to the southwards of Winterton commeth to be s. w. somewhat more westerly from you, then you are thwart of the point of the rif: you may not also runne about far without that rif, for then you should lightly be foul of the groundes to the eastwards of it, especially when you come from the northwards, for there it is not very wide betwixt them both.

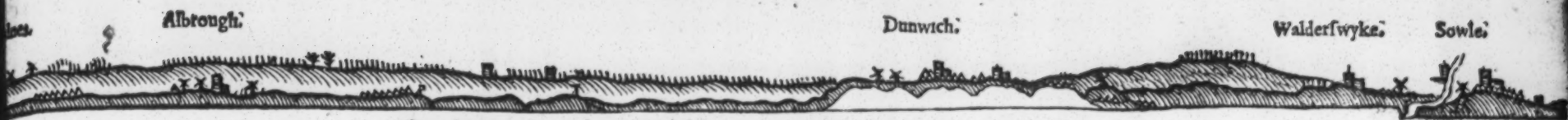
From Winterton to Haefbrough point, the course lieth northwest 3 leagues.

Betwixt Haefbrough and the Admirals house stands a ruinous tower upon the strand. When as you keep it and the steeple of Haefbrough one in the other comming from the northwards, then you run right upon the point of the foresaid riffe. Foure leagues without the land lieth Winterton sand, the south end whereof lieth about east, and the north end northeast from Winterton.

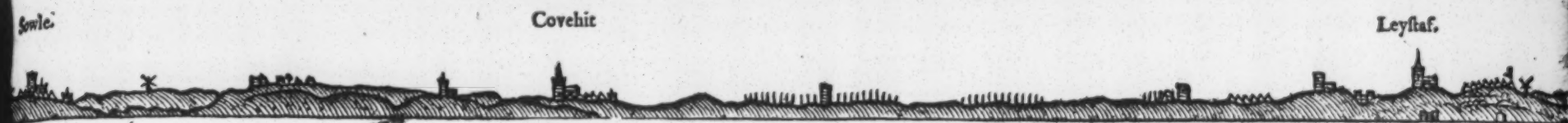
Thwart of Admirals house, not far from the shoare, lieth also a little plate where no ship can go over, but if you goe in 6 or 7 fathom, you cannot saile to neare it, you may also run through in two fathom, betwixt this plate and the land.

From Haefbrough to Cromer the coast lieth alongst northwest and by west, and westnorthwest 3 or 4 leagues.

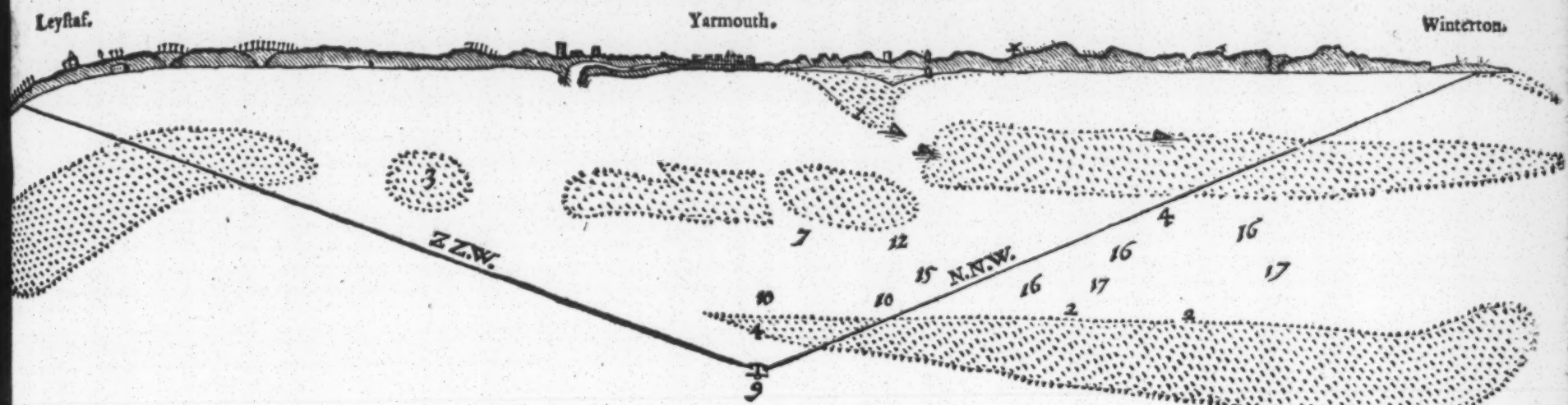
How these ianas doe shew themselves at sea.



Thus sheweth the coast of England betwixt Orfordnes and Sowle or Sowlehaven.

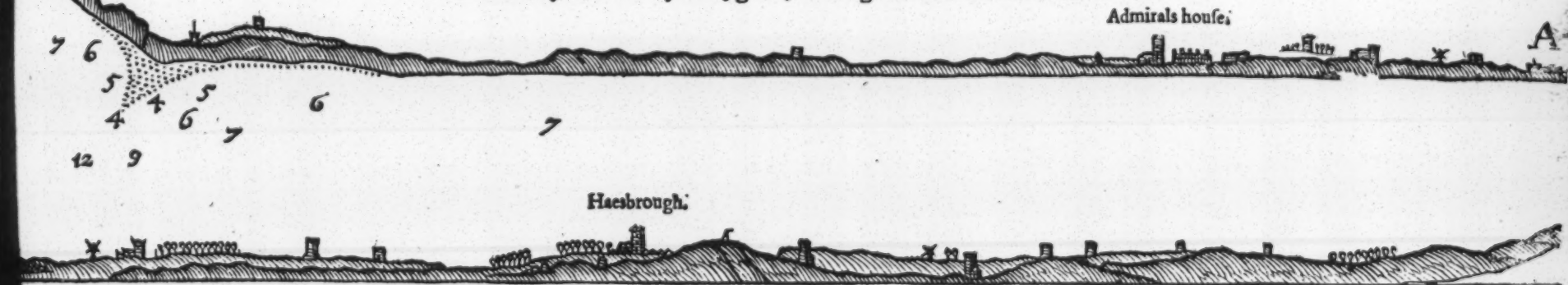


Thus sheweth the land betwixt Sowle and Leystaf.



Thus sheweth the land betwixt Leystaf and Winterton.

The land to the northwards of Winterton, untill past Haesbrough sheweth when you saile alongst by it, as is demonstrated in these two figures following, the A A one to the other.



Thus sheweth the land alongst the north coast of England, betwixt Yarmouth and Cromer, when you saile through within the bancks.

Of depths and shouls about these places, and in what depths men may see the land.

Five or six leagues without Leystaf and Yarmouth southeast and by east into sea it is 27 & 28 fathom deep, there you may see the land.

Four leagues east and by south from land, without the Holmes of Yarmouth, lieth a banck called the Newsand, which is not deeper then two fathom.

Eastnortheast at least 7 leagues from land thwart of Yarmouth it is 15 fathom, the ground red grosse sand, with little round stones, being there, you may even see the land from below.

Thwart of Winterton and Cromer 7 or 8 leagues from the land it is 18 and 19 fathom deep, and there you may see the land.

Winterton sand lieth 4 or 5 leagues from land northeast from Winterton.

What moone maketh high water at these places, and of the course of the streames.

At Leystaf & Yarmouth a southsoutheast moone maketh high water.

Without the bancks of Yarmouth, and before Cromer, a southeast Moone maketh full sea.

Betwixt the banckes of Harwich and the Holms of Yarmouth the flood falleth south, and the ebbe north.

Thwart of the bancks of Winterton & Cromer the flood falleth southsoutheast, and the ebbe northnorthwest.

How these foresaid places doe ly from other lands.

From Yarmouth or Leystaf to Walcheren or the Wierlings southeast & f.e. and by f. 38 or 40 leagues. From the point of Cromer or Shield, to the Tessel the course is east 40 or 42 leagues.

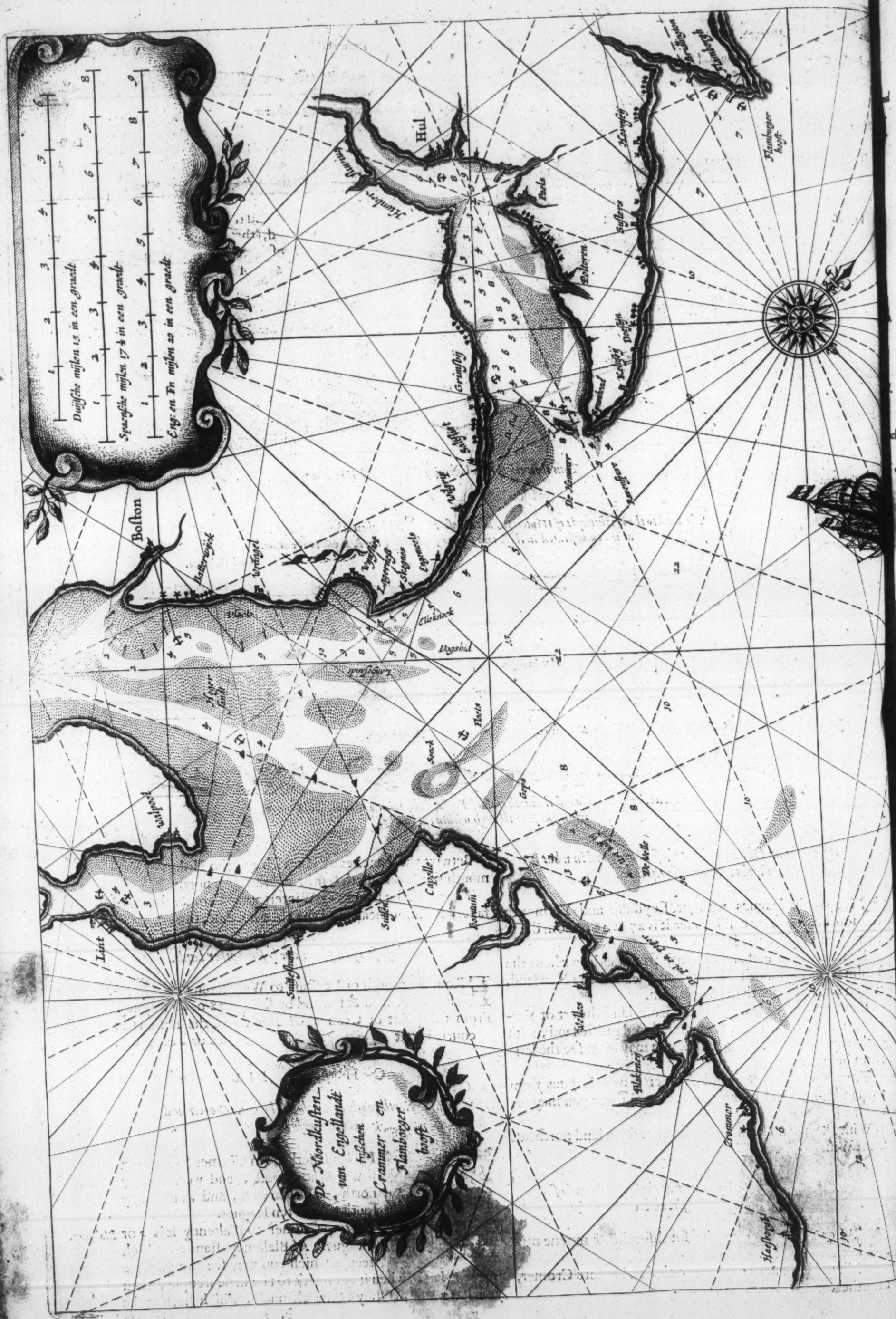
CHAP. III.

Of the North coasts of England, betwixt Cromer and Flambrough head.

The land lieth from Cromer to Bornum first westnorthwest, and west and by north, and then west, and west and by south nine or ten leagues.

From Cromer to Blakeney it is 3 or 4 leagues. At Blakeney standeth a high steeple, which you may see alongst farre over the land, when it commeth to the little steeple, then you have the first buy of the channell, which lieth at the

N 3 south



south end of the Pole, which is a sand at the west side of the channell of Blakeney, goe from the first buy to the other, and alongst by them; untill you come within the haven. This is a tydehaven, where men doe ly dry at low water.

Four leagues to the westwardes of Blakeney lieth Wells, betwixt them both lieth the foresaid showld, called the Poll and Pyper, there it is showld farre off at sea. At the west end of this showld, goeth in the Deepe of Wells, the beacons that you must saile in alongst by, stand all along by the Pyper. When Hoebrom standeth southsoutheast from you, then you are to the westwards of the Pyper, thwart of it is good road in six fathome. Welles lieth then southeast from you, and the trees stand then also against the steeple, then you may saile open into the haven of Wells, alongst by the foresaid beacons.

Betwixt Wells and Bornum lieth a banck, you may ride under it in five or sixe fathome, at half flood there is upon it no more then two fathome water.

He that will saile into Bornum, must goe in at high water, & he must bring the steeple against the black house, and saile in so by the beacons, leaving them on the larboard side. These are all tydehavens.

From Bornum to Chappel the course is westsouthwest two leagues, to the northwards of it lieth the Sonck, which is a sand that falleth drie at low water. You may saile about on both sides of the Sonck unto Lin.

For to saile into the Easter channell of Linne, then saile of about to the eastwards of the Sonck, and bring that wood of trees, over the point of Sislein or Snetsham, and Chappel east from you, then go in southeast and by south, and you shall finde the first buy, then in south and by west, and southsouthwest and by little and little more westerly, untill you come about the point, there the buys and beacons shall shew you the waie.

When you come about the point, then you may runne through the sands, into the norther channell, and saile out againe by the same into sea, by the buys & markes that are thereof. This norther channell lieth into sea northeast, and northeast and by east, & is verie well buyed & beackoned.

You may also saile into the westwards of the Sonck, to wit, south and by east in alongst by it and so runne to the first buy, & then from the buy alongst by the beacons, unto Lin before the towne. When you come from the eastwards, you may well run through within the Sonck, alongst by the land, close alongst by Chappell, and in south and by west unto the foresaid first buy.

For to saile from Cromer or Blakeney to Boston deepe, you must goe on west and by north, untill you come by the land betwixt the Hommer and Lagerneffe. From the Sonck lieth a long banck, called the Flats; north into sea a league, which at low water falleth drie at divers places. You runne with the foresaid west & by north course, (when you are by Cromer or Blakeney a little without the land) alongst without, or to the northwards of this banck, at high water you may well goe over it, the ground on the east side goeth up flat & plaine, run bowldly to it without feare, until you come in four or three fathome, he that useth his lead can take no hurt of it, but on the inner side, that is, on the west side it is very steepe, so soone as you be over the showldest, you shall get soddenly deepe water, and good sand ground, under it or within it, is good ryding for easterly windes.

For to saile into Boston deepe, through within the Knock or Elleknock, you must keepe the sounding of the shoare in four or five fathome, so long untill that the point of Lagerneffe be westnorthwest from you. Betwixt the shoare & Elleknock remayneth at low water five fathome in the midst of the channell, but Elleknock falleth drie at low water. When that Lagerneffe is westnorthwest from you, then goe on southeast, through betwixt Elleknock & the showld, (which shooteth off from the shoare to the westwards of Lagerneffe) untill that you get againe depth of fixe or seven fathome, in this going over remayneth at low water, no more then two fathome, but it floweth there about three fathome up and downe. Being over it, then go on south-west alongst betwixt Longsand and the showld, which lieth

of from the shoare, there it is deepe betwixt them both nine and tenne fathome, you may found both sides, (as well the showld which lieth off from the land, as Longsand) in five fathome, but the flat is somewhat steeper then Longsand.

For to saile without Elleknock into Bostons deep, coming (as is before said) to the west land, you must looke out for the two steeples of Ingoldmilles, standing somewhat to the northwards of Lagerneffe, bring them one in the other, and then they shall stand about northnorthwest from you, keep them one in the other, and goe on southsoutheast, untill that the trees upon the point by west Lagerneffe, come without the point of Lagerneffe, and then you run through betwixt Elleknock and Dogshead, (that is a showld without Elleknock.) When these a foresaid trees come a handspikes length past, or to the eastwards of the point of Lagerneffe, then goe on southwest, and then you runne right into the deepe, betwixt Elleknock and Longsand, and so you shall finde betwixt Elleknock, and the point of Longsand five fathome depth, being past Elleknock, it will be eight, nine and tenne fathome deepe.

If you will saile out of the sea into Boston deepe, and not alongst by the land, as is before said, then bring the foresaid trees a handspikes length without the point of Lagerneffe, which shall then stand from you about westsouthwest, saile in so right with them, untill that the high land within Lagerneffe or Winfleet beginne to come even without the point of Lagerneffe, which shall then be from you somewhat more northerly then west, then you are within the point of Longsand. Or els there stand three little houses on the sea side, about half waies betwixt Lagerneffe, and Ingoldmilles, when they come to be northwest from you, and those foresaid trees without the point, then you are also within the point of Longsand, goe in then s.w. betwixt Elleknock and Longsand, as a foresaid. A little past Lagerneffe lieth a showld or plate about the middest in the farewaie, but nearest Longsand, when the trees upon the point to the southwards of Winfleet come in the second valley of the high land within Winfleet, then you are right thwart of this showld, ed; therefore to one side or other, rather towards the showld, there it is widest, keep bowldly the sounding of the showld, & runne southwest alongst by it, untill that the steeple of Boston come over the steeple of Butterwyke, that is also a flat steeple, (but smaller then that of Boston) standing in a wood of trees, thwart of it runneth the showld somewhat off with a point, being past it, goe on westsouthwest all alongst by the foresaid showld, untill that the great steeple of Boston come over the second mill, there it is good anker by the west shoare in five fathome at low water. He that commeth there at low water, must anker and stay for the tyde untill half flood; before that you may not saile further in from thence, and then you shall not also find more then two fathom upon the showldest.

From thence the Deepe lieth in alongst by the beacons about south to the third beacon, being past that westsouthwest, and then by little and little, more westerly and northerly, but run al alongst by the beacons, leaving them on the starboard side, at last on north into the river.

Vpon the point of the river standeth a house, which is a sheephouse, before that you come by it, it seemeth as if there were no opening, by reason that it is all even green land, run in by it, all alongst by the land, being past it, the river doth open it selfe. Being come within the points you must run in betwixt two dykes, a league up untill you come before the towne, in the River it is at half flood everie where deepe enough. When as that you come a little within the houses of the towne on the larboard side, there you must let fall your anker, and stay untill that the water begin to fall, then you shall have flood enough for to drive to the Kay, there you make fast with one cable, it doth not begin to ebbe there, before that the water be fallen three foot.

An east and west moone maketh in Boston deepe the highest water, but before the towne an east and by south & eastsoutheast moone. He that commeth from Boston, and will saile out at the Deep with a high water, let him looke out for the foresaid high land within Lagerneffe, when that commeth

Ingoldmilles.

Dogshead.

Butterwyke.

commeth behind the point of Lagernes, then he may boldly set his course whether he desireth to be, either to the eastwards; northeastwards or northwards, there is nothing then that can hurt him.

*Plate by
Saltfleet
haven.*

From Lagernes to the Hommer it is about seven leagues, most north, betwixt them both, about a league to the southwards of the Hommer lieth a place called Saltfleet haven, a little to the northwards of a sharpe steeple called Wilgrip, thwart of that foresaid Saltfleet haven, about a English mile from the shoare lieth a banck or Sand plate, not very great, which at low water falleth almost dry, you must runne about without it, and leave it lying towards the land from you, but yet for need you may also saile through within it.

*For to saile
into the
Hommer.*

For to saile into the Hommer comming from the northwards, you must saile alongst by the shoare, and runne about by the north point, but comming by the point you must keepe somewhat off from the shoare in four or five fathom, for to avoid a little taile, which lieth off from the point, being about it, runne to the little Iland, which lieth a little by west that foresaid north point.

If comming from the southwards you desire to saile to the Hommer, then bring the Pawle Steeple (which is a high sharpe Steeple standing on the North side of the Hommer) a little by South the North point of the Hommer, or over that foresaid little Iland, and saile so right in with it, untill that you come by that little Iland, being come by it, leave it on the Starboard side and run in close by it, for to avoid a great Sand called the Bull, which lieth of from the South shoare almost unto that little Iland. When that you come within that little Iland, then bring the two Beakons (which stand upon that little Iland) one in the other, keepe them so standing, and saile so on to the westwards towards Grimsby, you leave the Bay upon the Bull lying then on the Larboard side, and run along to the northwards of it: In this faire way is it seven and eight fathom deepe. You may not come neerer the Bull then in fixe fathom. Before Grimsby you may anker in three or four fathom at low water, it floweth there at least 3 fathom up and down, a w.s.w. & e.n.e. Moone maketh before the Hommer the highest water. Within the foresaid little Iland at the North point of the Hommer, you may anker in 3 or 4 fathom: There lie commonly Ships that are bound out, and tarrie for the wind.

*Road be-
fore Grims-
by.*

From Grimsby in alongst to Hull, the course is west-northwest to the end of the Banke or ballast plate, which you must leave lying on the north side. On the south side lieth also a little plate, there standeth commonly a Beacon upon it, that you must leave on the larboard side, and run alongst to the northwards of it, being past it, you may run alongst by the south shoare in three fathom. The faire way there is four, five, and fixe, and thwart of the foresaid Beacon eight and tenne fathom. When you come to the end of the Banke, you must edge up to the westwards about by the Point on the south side, but there runneth off a flat which you must avoid. Being a little about that Point you shall see the Towne of Hull ly before you, there you may anker before it in fixe, seven, or eight fathom: An east and west Moone maketh full Sea before Hull. He that will anker upon the ballast plate, let him bring the flat steeple which standeth a little to the northwards or the eastwards of Hull to the high point of Pacl, and keepe them so standing untill that he come to the plate, there it is best for to anker upon it.

*Flambrough
head.*

From the north point of the Hommer called Spurne head to Flambrough head, the course is north and by west eight or nine leagues, betwixt them it is showld water of fix, seven, & eight fathom deepe. Flambrough head hath many white spots and Chalke Hills, especially upon the north side towards Fyley. Flambrough hath a Head or Piere. A league to the westwards of it on the south side lieth a little towne called Burlington, which hath also a Piere. You may anker there in the Bay in fixe or seven fathom.

*Burling-
ton.*

Of the depths thwart of these Lands.

THwart of Winterton and Cromer seven or eight leagues from Land it is eightene and nineteene fathom

deepe, and there you may see the Land. Northeast and northeast and by north from Cromer lieth a Banke, whereupon remaineth at half flood no more water then four fathom, from thence you may see the land indifferent well.

North and by east from Blakeney lieth a Banke, whereupon remaineth at half flood no more water then five fathom. In eightene fathom thereabouts you may see the land. From thence to the point of Chappell it is all showld.

About northnorthwest and north and by west from Winterton Sand, lieth the Banke before Cromer five leagues without the Coast.

To the northwards of the Hommer of Hull you may see the land in five and twenty fathom.

Of the Tydes and course of the Streames about these foresaid places.

BEfore Cromer a Southeast Moone maketh high water.

At Blakeney, Wels, Bornum, and Lyn, an east and west moone.

Before the Hommer of Hull an eastnortheast and west-southwest moone.

From Blakeney to Flambrough head the flood falleth southeast, and the ebbe northwest.

How these lands are lying one from the other, and from other lands.

From Cromer to Blakeney westnorthwest 3 or 4 leagues
From Blakeney to Bornum through within the sand west 7 leagues.

From Bornum to Chappel westsouthwest 2 leagues.

From Chappel to Elleknock, or the north point of Boston deepe, the course is northwest and by north 5 leagues.

From thence to the north point of Cromer north, & north and by west 7 leagues.

From the north point of the Hommer to Flambrough head northnorthwest 9 leagues.

From the point of Cromer or Shield to the Tessel east 40 or 42 leagues.

From the north point of the Hommer to the Tessel east and by south and eastsoutheast 60 leagues.

Heights of these foresaid places.

Yarmouth lieth in 52 degrees 52 minutes.
The north point of the Hommer of Hull in 53 degrees 20 minutes.

C H A P. I V.

The Coast of England betwixt Flambrough head and Tynmouth, or the river of Newcastle.



Three leagues by west Flambrough head lieth Fyley, in a round bay to the southwards of a point that lieth out, which hath a Pier or Head, where you may ly within it, but it falleth there drie at low water.

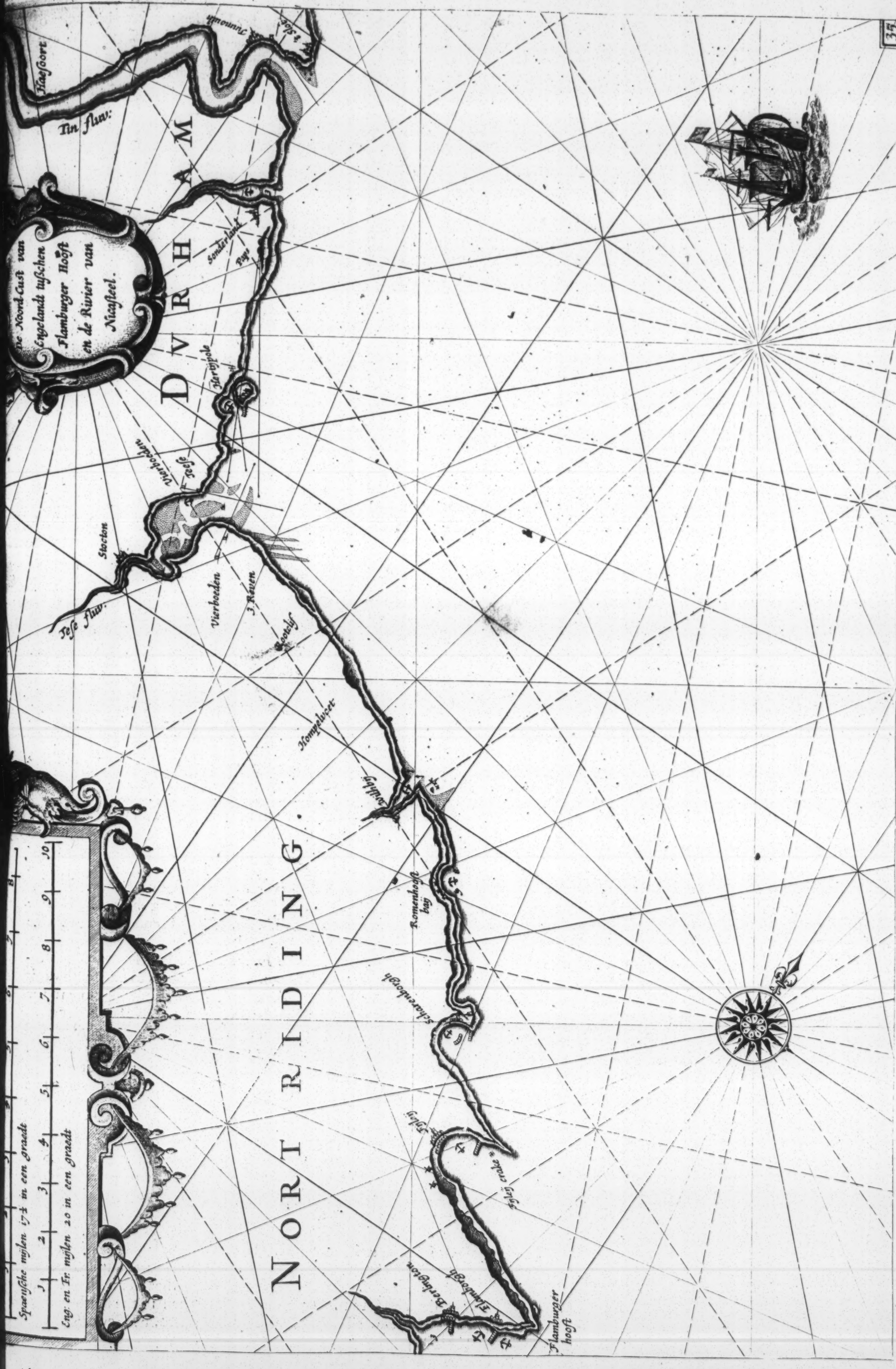
Without the head of Fyley lieth a rock under water, called Fyley bridge, betwixt it and the Pier you may well lie afloat with a shippe of an hundred last, in five fathome at low water, and have shelter for a northeast and east wind.

From the point of Fyley to Scharbrough it is northwest two leagues. Scharbrough hath two Pieres or Heads, where you may runne within them at high water from the southwards, but a low water it falleth there also drie. Men come in there from the southwards.

From Scharbrough the coast lieth alongst by Robbinhoods bay, untill before Whidby, most northwest, but past Whidby the land falleth in westnorthwest, and by little and little more westerly unto the Tees.

Kobbinhoods bay is a good road for a southsouthwest & west wind, there men ly in 7 or 8 fathome.

Whidby



Spanische mijlen 17 1/2 in een graadt
Eng: en Ir. mijlen 20 in een graadt

De Noord-Cust van
Engelandt tusschen
Flamburger Hoof
en de Rivier van
Nicassteel.

Whidby is a tidehaven, which falleth drie at low water, at the east side of the haven runneth off a riffe of rocks, whereof you must take heed. For to saile in there, you must run in betwixt the two beakons, untill that you come in betwixt the two lands, and ancker there.

Huntley-foot. From Whidby to the Teese the coast lieth most west-northwest, and west and by north, about seven leagues, betwixt both ly Huntleyfoot and Redcliffe. Huntleyfoot is a high hill, lying on the sea side, about four leagues to the eastwards of the Tees. Redcliffe lieth about half wayes betwixt Huntleyfoot and the Tees, it is a cliffe of such very redde earth, that when the sunne doth shine against it, it is to see to like redde cloth: these two are very good markes, for to know this coast by.

Close to the southwards of the mouth of the Tees lie three Riffes, which lie about a half league east northeast into sea, which are verie foul and stony, and fall drie at low water, upon the north side they are very flatte, so that you may sound about by them, in five, sixe, and seven fathome, but on the south side are so steepe, that comming neare them, and sounding in 13 and 14 fathome, you should be upon them, before you should be able to have the lead.

A league and a half to the northwards of the Teese lieth Hartlepoole, upon a point that lieth out almost like an Iland. For to goe in there you must run into a bight to the southwards of the towne within a head, untill you come against the towne, there you shall ly dry at low water.

Hartlepoole About half waies betwixt Hartlepoole and the Teese, runneth off also a riffe of rocks thwart from the shoare a good waies into sea, come no nearer it then in 5 or 6 fathom. There standeth a mill to the northwards of the towne Hartlepoole, if you keepe that to the west side of the towne Hartlepoole, then you cannot fail upon that foresaid rif, but if you bring the foresaid mill a little to the westwards from the towne, so that you may plainly see through betwixt the mill and the towne, then you shall not faile to saile upon that riffe.

For to saile into the Tees. For to saile into the Teese comming from the northwards, you must observe these markes following. A good waies to the northwards of Hartlepoole, a little to the southwards of Sonderland, and a little within the land ly upon the high land, two hommokes close one to the other, very good to be knowne, of fashion like womens breasts, called the Paps, keepe these two hommokes even without the point of Hartlepoole, which shall then stand from you northwest and by north, and saile so on to the southwards, and you shall fall before the Tees, and shall not faile too neare the sands that lie out before the mouth of the Tees, and ly off about a half league into sea.

The Paps.

On both sides, as well on the north side, as the south side of the Tees stand two little white houses for firebeakons: If you come from the northwards and get sight of them, then bring first the two southermost one in the other, which shall then stand from you south and by east, saile right in with them, untill that the other two, which stand on the north side of the Tees, come also one in the other, then leave them on the south side, and saile in right with them that stand on the north side, and so you shall runne in amidst the channell, there is upon the barre, or showldest, at low water no more then five foot, but it floweth there with a common tide, at least two fathome up & downe. A southwest moone maketh there full sea. If when you come from the southwards, you will saile into the Teese, then bring the innermost of the two firebeakons (which stand on the north side) at least a handspikes length, or the length of a capstone barre, to the northwards of the other, and runne so westwards towards them, untill that the two firebeakons on the south side are one in the other, then saile in right with them, as hath beene said, untill that the two firebeakons on the north side come one in the other: when you have them one in the other, runne in right with them, untill that you come by the north shoare, and then close alongst by it.

When as that you come so farre in past the first firebea-

kon, to wit, that you may see Hartlepoole betwixt the two firebeakons, there you may ancker in three, four, or five fathome, or when Hartlepoole commeth betwixt the foresaid firebeakons, then go southsouthwest, untill that you come by the south shoare, there it is also good anckering. Further it is Pilots water unto Stockton, for there within, the Deepes doe shifte oftentimes, and that in short time, three, four, or five times in a summer.

He that will saile in there with northerlie windes and a floud, must reckon well his tides, for the flood falleth strong to the southwardes over the groundes, and should thereby bee lightlie carried behind the banck to the southwardes of the buye, which lieth upon the point of the banck.

Besides this foresaid channell there runneth yet another channell through the grounds, which lieth, off from the north point of the Tees. For to saile in there, you must take marke of the two high lands within the land, to the southwardes of the Tees, bring them within a handspikes length one to the other, or bring the Paps to the west side of Hartlepoole, then shall also the foresaid two high lands come within a handspikes length neare one to the other, saile in right with them, and so you shall run right into that new channell, alongst through that afore said sand, & come against the buye (upon the sandes, on the south side of the Deepe) againe in the right farewaie. When that you get againe deeper water, or have the two firebeakons on the north side one in the other, then goe in towards them, and further as hath beene before said.

About seven leagues to the northwardes of the Tees lieth the river of Sonderland, a little to the northwardes of the Paps, which are verie good markes for to knowe the land by there aboutes. When the Paps are southsouthwest from you, and that you are about an English mile from the land, then you are right before the river of Sonderland, the ground is there abouts indifferent cleane, but somewhat stonie, you may ancker there in four, five, and six fathome. On both sides, as well on the north point, as the south point of the River it is stonie. On the north point standeth a beakon in the water there you must run in, within a little shippes length alongst by it, being past that you shall get deeper water, to wit a fathome and a halfe, and two fathome at low water, but upon the barre remaineth no more then three foot. With a common spring and high water there is about two fathome and a halfe, or a little more.

After this afore said first depth of a fathome and a halfe or two fathome, you shall meete againe with a stonie floore, about three shippes lengths broad, upon it is a high water about eleven or twelve foot deepe, according as the tydes shall runne: being over there it is againe deeper. A little past that is a narrowe place, where a long shippe shall scarce be able to wend, within it, it is wide enough, and everie where good ancker ground.

From the Tees to Tynmouth the course is northnorthwest eight or nine leagues. Two leagues to the southwards of Tynmouth lieth the point of Sonderland, but close to the southwardes of Tynmouth goeth in the river of Newcastle. From the point of Tynmouth shooteth off a ledge of rockes, you must saile in by it, leaving it on the starboard side. The markes for to saile into this River are two firetowres or firebeakons, which stand upon the north shoare, bring them on in the other, or the innermost (that is the highest) a little to the northwardes of the outermost or lowest, and saile so right in, alongst by the afore said ledge of rockes on the north side, and so you shall have upon the showldest two fathome at halfe flood, a southwest moone maketh there full sea. The south shoare is flatte, you may leade it in there with the sounding pole, for shippes that goe not deepe, in tenne foot at halfe flood. When you come within, runne all alongst by the north shoare, untill past the little towne Sheels, edge then over to the other shoare, untill you come through the crooked reach, there the river lieth up againe a little to the northwardes, and then to the southwards to Hawkes-bill, and about by it to the towne Newcastle.

In what depths men may see these foresaid lands.

Flambrough head men may see in five and thirtie fathome.
Scharbrough men may see from below in five and fortie fathome.

Of the tydes and course of the Streames thwart of these coasts.

AT Flambrough and Fyley, in the Peer a westsouthwest moone maketh full sea.

At Scharbrough and Robbin hoods bay a southwest and northeast Moone.

In the Tees and Hartlepoole also a southwest and northeast Moone.

Before the river of Newcastle a southwest and northeast moone maketh also the highest water.

Thwart of Flambrough head, Scharbrough, the Teese, and also thwart of the river of Newcastle the flood falleth southeast, and the ebbe northwest.

To the northwardes of the Tees, the flood falleth south-southeast alongst the land, and from the Teese to Scharbrough southeast and by east.

How these lands doe lie one from the other and from other lands.

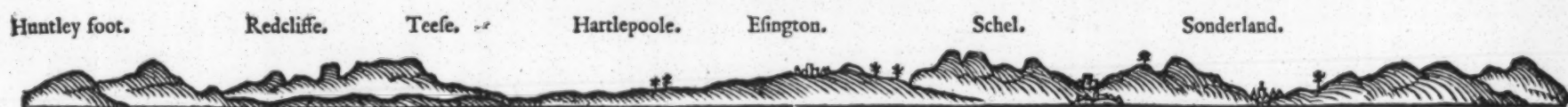
From Flambrough head to Fyley northwest 3 leagues.
From Fyley to Scharbrough northwest 2 leagues.
From Scharbrough to Whidbie northwest & by west 5 leag.
From Whidbie to the Teese, the course is first westnorthwest and afterwards west and by north 7 leagues.
From the Teese to Tynmouth northnorthwest 8 or 9 leag.
From Whidbie to Tynmouth the course is northwest and southeast 16 leagues.

Heights of these lands.

Flambrough head lieth in 54 degrees 5 minutes. Scharbrough in 54 degrees 12 minutes.

Tynmouth or the River of Newcastle in 55 degr.

How these lands doe shew themselves at sea.



Thus sheweth the land betwixt Tynmouth and the hilles of Huntley foot and Redcliffe, to the southwardes of the Teese, when you saile alongst by it.



Thus sheweth the land betwixt the Tees and Flambrough head when you saile alongst by it.

C H A P. V.

Of the Coasts of England and Scotland betwixt Tynmouth and the River of Donddée.

SEven or eight leagues to the northwardes of Tynmouth lieth the Cocket Iland. Betwixt them both about half waies lieth a River called Bly; where the French men doe much faile to fetch coales. From the north point of this river runneth off a ledge of rocks a great shot of a cast peece, about southeast into the sea, but the south side, and the coast to the southwardes of it, is verie cleane and sand strand. Vpon the south point stand two beacons: if you will saile in there, bring them one in the other, and faile right in with them, and then you can take no hurt of the foresaid ledge or riffe of the north point. When that you come by or thwart of the outermost of the two foresaid beacons, you shall yet see there by it an other smaller beacon, that standeth upon a little ledge of rocks, that shooteth off from the south point, leave that on the larboard side, & runne in alongst close about to the northwardes of it. The foresaid ledge of rockes on the north side remaineth at high water (a good waies from the land, and also at a spring tide) above water, within it is a bight, there it is good lying for a north or northeast winde, and there remaineth at low water two fathome depth. In the mouth of the River it is with an ordinarie tide and high water about two fathome deepe, or somewhat more, and it floweth there two fathome up and downe, so that at low water it falleth almost altogether drie.

The Cocket Iland is a verie little Iland, and not high, it lieth about a half league from the land, you may come to ancker within it for an east, south, and southeast winde, but the winde comming to the northwards or the east, maketh there bad road, for you must lie betwixt the Iland and the maine land where you have no shelter for a northwinde. On the south side of the Iland the ground is foule, and a little to the southwardes of the Iland, runneth off a foule ledge of rockes from the shoare, untill thwart or past the Iland. He that commeth from the southwardes, must keepe the Castle

East. Water. iiii. Booke.

of Bambrough without the Iland, or els he shold not faile to saile upon the point of that foresaid ledge.

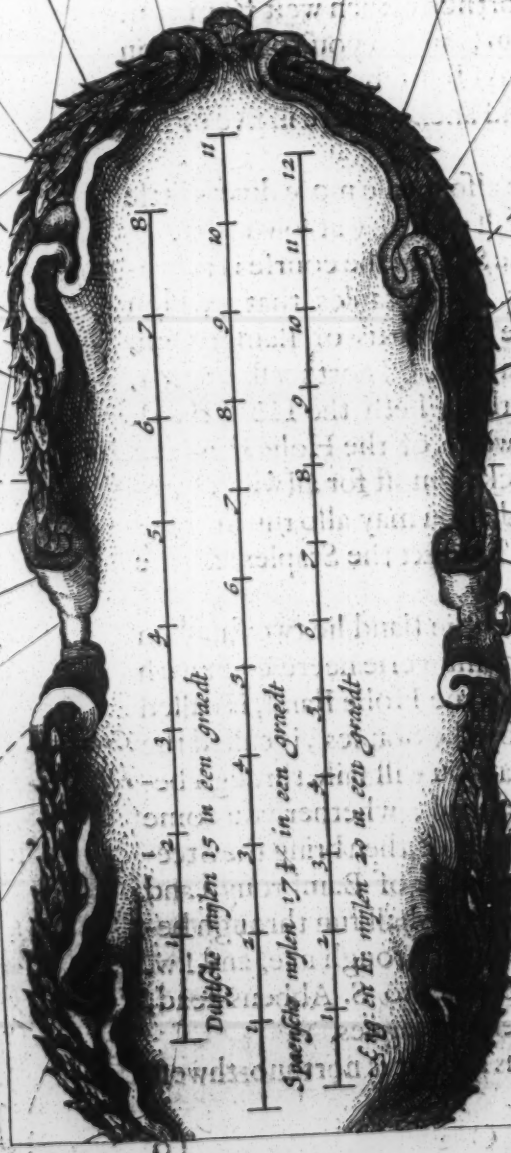
Betwixt that ledge and the Iland it is also verie narrowe, so that a man standing at low water marke upon the rockes of this ledge, shold almost be able to cast with a stone unto the Ilands. For to saile in there, take heed unto these markes hereafter described: there standeth a house upon the sea side, which is a salt kettell, and also a castle somewhat further in within the land, which doth shew it selfe high enough, bring them one in the other, and then they shall stand somewhat more northerly then west from you, and runne so right in with them, and so you shall runne in right amidst the channell betwixt both, being come within, edge up behind the Iland, and ancker there in five or sixe fathome.

About this Iland there runne also manie more divers little Rivers into the land, but they fall most dry at low water.

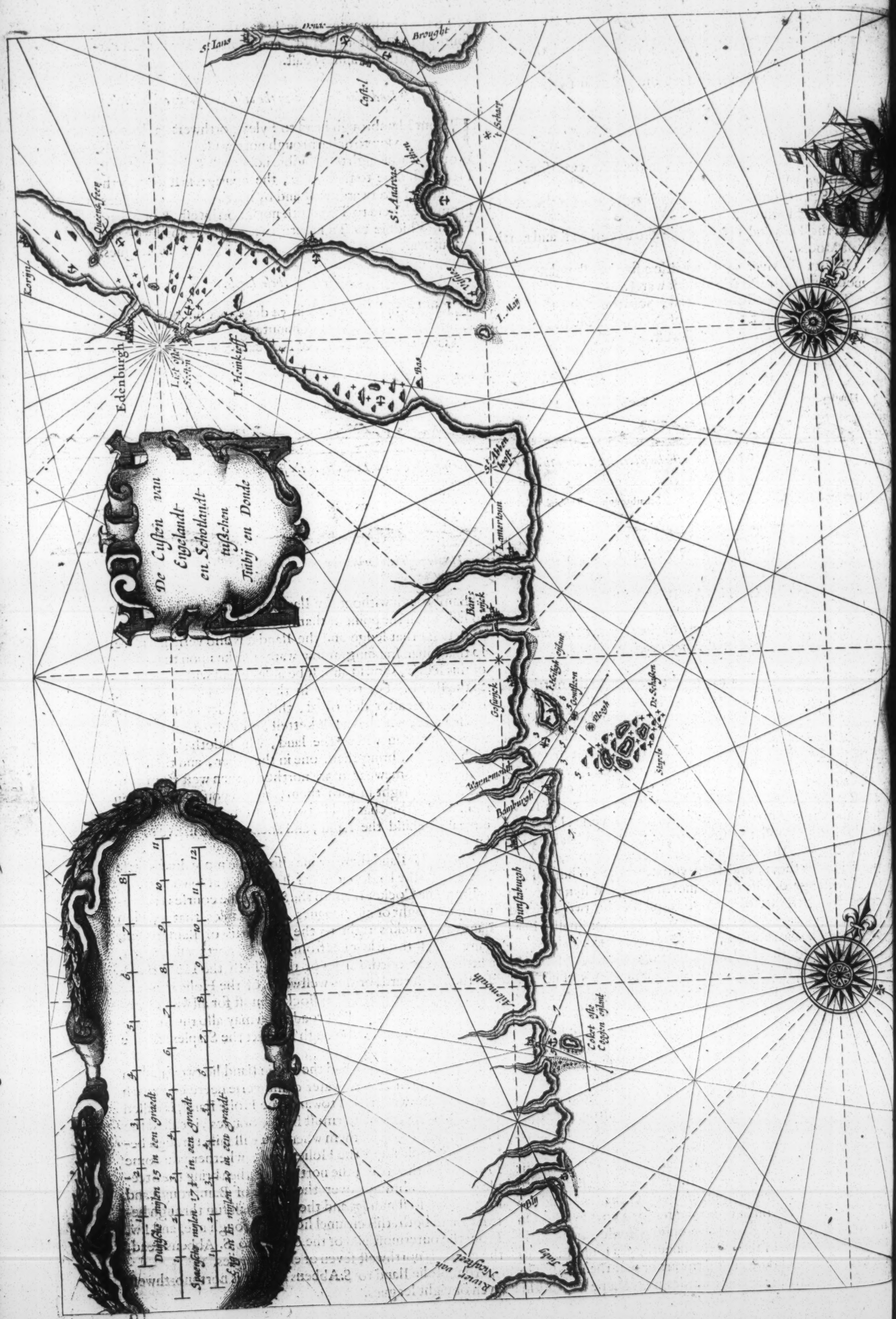
From the Cocket Iland to the Staples the course is north-northwest eight or nine leagues. The Staples, that are high Ilands and rockes right to the eastwards of Bambrough, lying at least three leagues from the land northeast into sea, a little to the northwardes of them lieth the Holie Iland. To the southwardes or the westwardes of the Holie Iland is a bay, where you may lie landlocked almost for all windes, against the Castle is the best road: you may also run in there from the southwardes, through betwixt the Staples and the maine land.

Betwixt the Staples and the Holie Iland lie two suncken Rockes, which at low water come verie neere even with the water, the westernmost towards the Holie Iland, is called the Goldstone, the easternmost by the Staples, is called the Plough. For to avoid them when you will saile through betwixt the Staples and the Holie Iland, whether you come from the southwardes or the northwardes, then bring the Steeple of Teustenbrough over the Castle of Bambrough and keepe them so standing, and then you shall run through betwixt them both, this channel lieth so through n. e. and s. w. From the outermost end of the Staples to S. Abbens head, the course is northwest seven or eight leagues.

From Holie Iland to S. Abbens head it is northnorthwest seven or eight leagues.



De Cuſten van
Engelandt
en Schotland
tuſſchen
Tutbij en Donde



To the northwardes of S. Abbens head men doe runne in unto Lieth and to Edenbrough in Scotland.

S. Abbens head and the Iland the Bas lie east and west 4 leagues afunder. The Iland May and S. Abbens head north-west and southeast 4 great leagues. May and Bas lie one from the other southwest and by east three leagues and a halfe. The Bas is a high round Rocke cleane round about, which you may saile alongst by on both sides. Betwixt the Rock and the South shoare it is tenne and twelve fathome deepe, but the common faire way is alongst to the northwards of it. Betweene S. Abbens head and the Bas it is most part a cleane Coast, but without Anker ground. The Iland May is greater then the Bas, and also cleane round about, except on the east side, there it is foule.

From S. Abbens head alongst to the northwards of the Bas, the course is west and by north, and westnorthwest four leagues, and from by north the Bas to the Iland Inchkieth west and west and by north about five leagues. Betweene the Bas and Inchkieth by the South shoare lie many Rockes, little Ilands and foule grounds, where at divers places is road, but are not to be used, but by them which are there verie well acquainted. Inchkieth & the Iland May lie southwest and by west, and northeast and by east seven great leagues afunder. Inchkieth is somewhat a long small Iland, a league to the northwards of it lieth an out-point on the north Coast called Kingorneffe, before it and about it lie some little Rocks under water, but a little to the eastwards of the point is good anker ground and road for westerly winds. Betweene that point and the Iland May, or the point of Fifsnes on the north shoare ly divers little Havens, where of some of them doe also yeeld out Coales, but are little or nothing used by the Hollanders. On both sides of Inchkieth is good ground, and good lying as well for westerly as easterly winds.

From Inchkieth to Lieth it is southwest a league. Before Lieth about halfe an English mile from the shoare lieth a Rocke upon which standeth a Mast (with a crosse or some other thing of wood upon the top of it) for a beakon. At high water the Sea floweth over it, and at low water it falleth dry. With a spring tyde at low water men may goe on foot to it. From the east side of that Rocke lieth off a riffe almost unto Inchkieth. You may also run through to the southwardes of Inchkieth betwixt that foresaid Riffe and the south shoare, but it is not to be done, but by them which are there exceeding well acquainted: There it is altogether full of rocks and foule ground. When as you saile into the northwards of Inchkieth you must leave the foresaid Mast on the larboard side, and run about to the northwardes of it, and then towards the south shoare, and anker about halfe an English mile by west Lieth, and also halfe an English mile from the shoare, in fixe, seven, or eight fathome. Lieth is the haven of Edenbrough, a tyde Haven which falleth dry at low water.

From Lieth to Queenes Ferrie there lie on both sides many Rockes, some above and some under water. In the Narrow before Queenes Ferrie lieth a little Iland called Inchgarve which you must runne alongst to the northwards of, on the south side it is with a Stone bancke (where men may goe over at low water) fast to the maine Land, alongst to the northwards of it, it is cleane and deepe. Within that little Iland lie Caryn and other places more where men doe lade Coales.

Vnder the east side of the point to the northwards of Queenes Ferrie is good road in two, three, or four fathom, according as you lie farre from the shoare.

A league north from the Iland May lieth the Point of Fifsnes, lying from S. Abbens head northwest and by north five great leagues. From thence to Dondee it is north-northwest five leagues. Dondee is a good Haven which goeth in betwixt two high Lands, being within men doe anker before the Towne. Farther in upon the River lieth another Towne called S. Johns, which you may goe up to at high water.

Betweene the Point of Fifsnes and Dondee lieth also the Bay of S. Andrewes, there is all over good anker ground.

Four great leagues north and by east from the Point of Fifsnes, and northeast from S. Andrewes lieth a great Rocke called the Inchcap, which the Sea floweth over at high water, and at low water it falleth so dry, that the Fishermen goe upon it.

Of the Tydes and course of the Streames.

ON these Coasts betwixt Tynmouth and S. Abbens head a southwest and northeast Moone maketh high water.

At Lieth in the Haven a southwest and by west moone maketh full Sea.

The Flood falleth alongst these Coasts southsoutheast, and the Ebbe northnorthwest.

How these Lands doe lie one from the other, and from other Lands.

FROM Tynmouth to the Cocket Iland northnorthwest 8 or 9 leagues.

From Tynmouth to the Staples n. and by w. 16 leagues.

From the Staples to Barwicke westnorthwest 3 leagues.

From Barwicke to S. Abbens head n. n. w. 5 leagues.

From the Staples to S. Abbens head n. w. 8 or 9 leagues.

From S. Abbens head to the Bas west 4 leagues.

From the Bas to Inchkieth west and west and by north 5 leagues.

From S. Abbens head to the Iland May northwest four great leagues.

From S. Abbens head to Fifsnes northwest and by north 5 great leagues.

From Fifsnes to Dondee northnorthwest 5 leagues.

From Tynmouth to Schuytenes northeast 104 leagues.

From Tynmouth to the Naze northeast and by east easterly 103 leagues.

From Tynmouth to the Scaw eastnortheast 136 leagues.

From Tynmouth to Holy Land east and by south easterly 106 leagues.

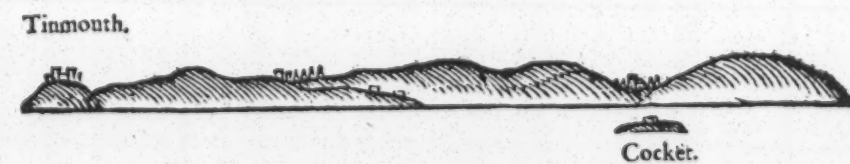
From Fifsnes to Stone Bay north and by east 16 leagues.

Heights of these Lands.

Tynmouth or the River of Newcastle lieth in the height of 55 degrees.

S. Abbens head in Scotland in 56 degrees 12 minutes.

How these lands doe shew themselves at Sea.



This sheweth the Land betwixt Tynmouth and Cocket Iland.

C H A P. V I.

The Coasts of Scotland from Dondee to the Ilands of Orckney.

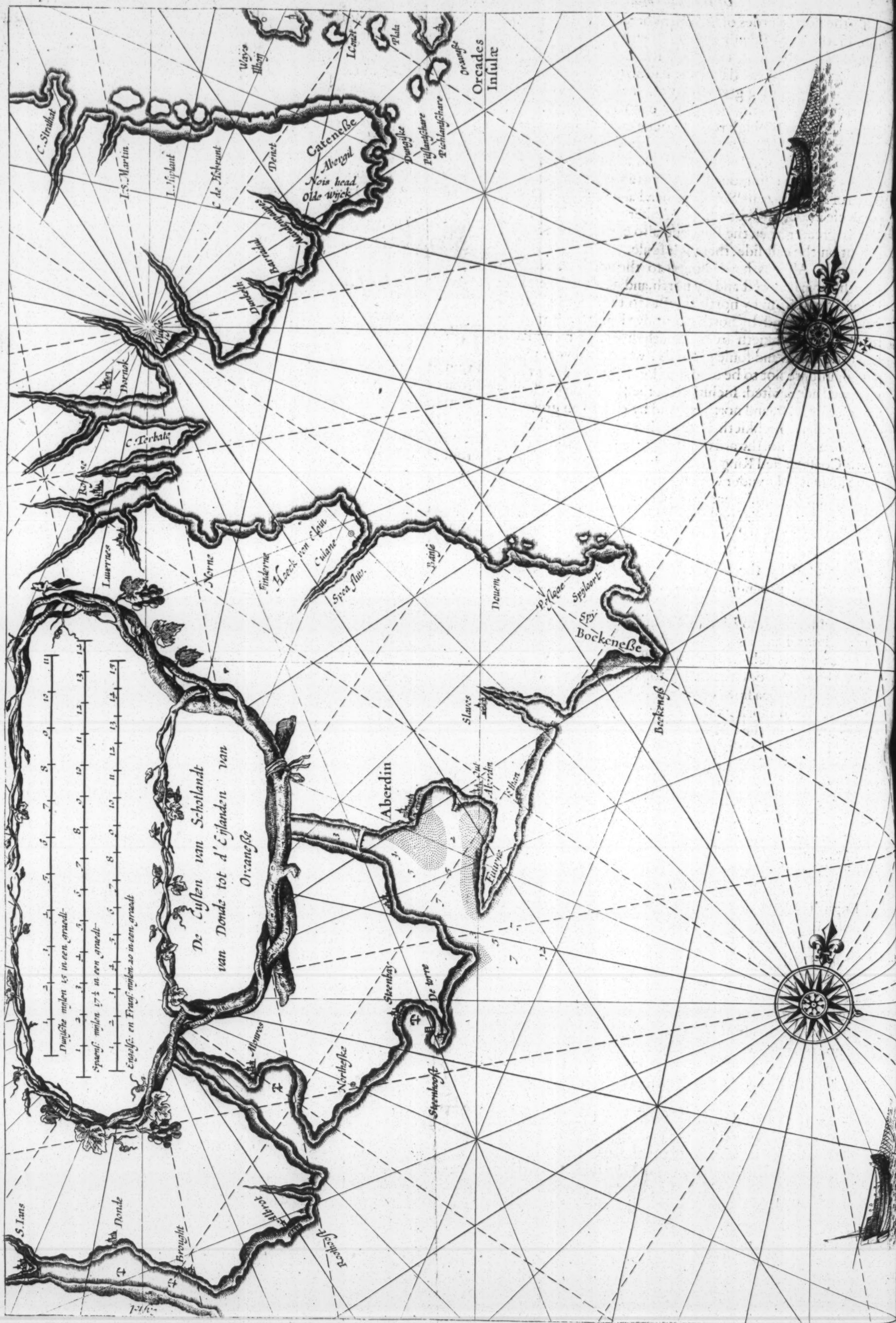


Even leagues to the northwards of Dondee lieth Monrosse, a good Haven. First, you must saile in there amidst the channel, and then edge up to the northwards and anker before the Towne.

Betwixt Dondee and Monrosse lieth an out-point called Redhead, about a great league to the southwards of Monrosse. There standeth a high Tower upon the land called Albrot.

From Monrosse to Stone Bay or De Torre, the course is northeast and by north foure leagues. This is a deepe Bay and a good Haven for those that are bound to the southwards, where men may lie Landlockt with many shippes.

Three leagues to the northwardes of it lieth Aberdyn. In this Havens mouth it is three fathome deepe. The West point



point is somewhat foule, therefore you must runne in by the East-Land, untill you come within the Haven, and anchor before the Towne in four or five fathome. Vp to the northwards is a great bay, but is showld on both sides. There goeth through a little Creeke towards old Aberdyn, which is an old ruinous Towne.

From Aberdyn to Boockenes the course is northnorth-east twelve or thirteene leagues. Betwixt them both lieth a tyde Haven. Boockenes is a high Hill and lieth upon the south side of the point. To the northwards of Boockenes lieth a Bay as a Haven called Spy or Spilaert. From thence the land lieth in west and westsouthwest unto the Haven of Rosse or Luvernes.

To the northwardes of Rosse lieth an out-point called Capo Terbate, right in the bottome of the Bay betwixt Catnes and Boockenes, distant from Boockenes about 19 or 20 leagues. In this bay lie manie havens and sounds, which are deepe enough for to come into with great shippes. It is from thence to Catnes sixteene leagues northeast and by North. Catnes lieth from Boockenes northwest, and northwest and by north one and twentie or two and twentie leagues. From Boockenes unto the outermost Orkenes it is north and north and by west two and thirtie, or three and thirtie leagues.

The Orckneys are one and thirtie Ilands in number, first Wayets or Elhoy, which lieth next to Scotland, five leagues about the point. About northnortheast off from the point of Catnes lie two little Ilands, Pits and Pichlantschare, there you may run through to the westwards betwixt Elhoy and Scotland.

To the northwards of them lieth an Iland called Heynda, with an other Iland called Platta, to the northwardes of Platta lieth Mayland or Ponoma. On the north side of this great Iland are all the havens where the shippes come to.

Vpon the east side of this great Iland lieth an other Iland called Kabunsa, to the northwards of it lieth an other Iland at the northeast point of the great Iland, you may also run through there towards Papewester, and leave Sanda lying on the starboard side.

Close to Papewester lieth Fara, to the southwards of it, is Sirza. To the eastwards of Sirza and Fara lie two Ilands, in the middest of all these Ilands, called Eeda and Chapnoza.

Sanda lieth to the northwardes of all these Ilands, but Papa and Stronza lie to the southwards of Sanda.

To the eastwardes of Stronza lieth an Iland called Cui-stella, that is the eastermost Iland of all, the northermost is called Ronalze or Northernanfe.

Eleven or twelve leagues northwest from the great Iland lie two rockes, the one under water and the other above water, he that commeth from the westwards, must take heed of them.

Of the tydes, and course of the streames.

AT Orckenes and Boockenes a southwest and northeast Moone maketh high water.

The flouds come about from behind Scotland from the westwards through betwixt Fairhill & Orckenesse, & make thereabouts full sea with a southwest and northeast Moone.

From Boockenesse the floud falleth south alongst the coast towards Lieth, and the ebbe north to the contrarie.

In this Farewaie it is deepe, 40, 50, and 60 fathom, in five and fortie, and fiftie fathome you may see the land. In this farewaie in the Sommer the first Herrings are caught.

How these places doe lie one from the other, and from other lands.

From Redhead to Monros northwest	4 leagues.
From Monros to Stonebay n. e. and by n.	4 leagues.
From Stonebay to Boockenes northnortheast somewhat northerly	16 leagues.
From Aberdine to Boockenes northnortheast	12 leagues.
From Boockenes to Phyloort or Spyloort northnorthwest	3 leagues.
From Phyloort to the point of Elgyn west	10 leagues.
From the point of Elgyn to the haven of Rosse or Luvernes west and by south somewhat southerly	7 leagues.
From Cape de Terbate to Catnes n.e. & by n.	16 leagues.
From Catnes to Ilhoy w.n.w.	5 leagues.
From Boockenes to Catnes northwest and northwest and by north	21 leagues.
From Boockenes to the Orckeneys n. and by w.	26 leagues.
From Boockenes to Hanglip, or the south end of Hitland north and by east	53 leagues.
From Boockenes to Schuytenes east and by north	69 leagues.
From Boockenes to the Naze east somewhat southerly	88 or 90 leagues.
From Boockenes to Boevenbergen in Iutland east and by south	104 leagues.
From Boockenes to Holy land southeast & by east easterly	123 leagues.
From Boockenes to the Tessel southeast southerly	125 leagues.
From Boockenes to the Holmes before Yarmouth southeast somewhat easterly	98 leagues.
From Aberdyne to the Holmes before Yarmouth southeast and by south	93 leagues.

Heights of these lands.

Boockenes lieth in the height of 57 degr. 50 minut. Catnes in 58 degrees 32 minutes.

The greatest or the outermost Iland of the Orckeneys in 59 degrees 8 minutes.

How these lands doe shew themselves at sea.



Thus sheweth the land of Scotland to the northwardes of Aberdyne, when you saile alongst by it two leagues from the land.



In this forme sheweth the land of Catnes, when you saile alongst by it.



Thus sheweth the northeast point of Orckenes when you saile alongst by it.



Thus sheweth Boockenes when you saile along by it.

C H A P. VII.

The Coasts of Fairehill, Hitland, and the Ilands lying about them.

Fairehill.



THE Iland Fairehill lieth from the east point of the Orcanays northeast, and from Boeckenesse north and by west about seven and thirtie leagues.

On the westside of Fairehill is at some places foule ground, but upon the south-east side is good ancker ground, there you may ancker everie where.

Fulo.

Fulo lieth from Fairehill northwest and by north ten leagues, betwixt them both lieth the southermost point of Hitland, lying from Fairehill northnortheast seven or eight leagues, and from Fulo east and by south four leagues.

The southwest coast of Hitland, (to wit from the southermost point to the northwest point) lieth northwest and by north seven or eight leagues. On the same southwest side, over against the Iland Fulo lieth a Sandbay, where men may ancker, but on the east side of this Bay it is somewhat foule. From that northwest or west point off to the north end, the land of Hitland lieth northeast and southwest seventene or eightene leagues.

Two leagues to the northwardes of the foresaid west point lieth the haven of S. Magnus, which is a broad Sound, within it is good ancker ground in fixteene or seventene fathome depth, according as you shall be farre within the land. On the north side lieth a high rock, where you must runne in, to the southwardes of. And on the south side lie two or three rocks, which you must leave on the starboard side, when you will saile in there.

Even to the eastwardes about the south point of Hitland, lieth a faire sandbay, where you may ancker in twelve or thirteene fathome, from thence to Hanglip the course is northeast somewhat easterlie nine or ten leagues.

Hanglip.

Betwixt Hanglip and the south point lieth en Iland which you may saile about on both sides, within it lieth Hambrough haven, or the Scottish haven, which is a lade place for the Hamburgers and Scotts. This haven is also called Bremer haven. There lieth also a high steepe point to the southwardes of Hanglip, to the southwardes of it men doe runne into Broadfound, the chiefeft haven of all Hitland, which is deepe and hath cleane ground, there men doe lie landlockt for all windes.

Hambrough haven.

Broadfound.

From the broad found lieth a sound in alongst to the northwardes, through the land, which commeth out again into the sound to the northwardes, and so maketh an Iland of the land, whereupon the high hill Hanglip lieth. When as you will saile in there from the northwardes, that is to the northwardes of Hanglip, you must runne in nearest by the south shoare, an edge to it betimes. In this channell betwixt both lands lie two Ilands or rockes, the greatest lieth nearest the north shoare, and the smallest nearest the south shoare, betwixt them both lieth also a funcken rock, which at low water is uncovered, and at high water you may know it by the breaking upon it. When as you will saile in here, you must leave the foresaid greatest rock, with the funcken rock, on the starboard side, and the smallest rock on the larboard side, there is upon the shouldest three fathome and a half water.

With in this haven lie also two havens at the north point, which lie into the land, where is good lying.

When as you will saile from this foresaid haven through within unto the broad found, you shall meet scarce halfe waies, with a rock, from which lieth off a riffe towards the west shoare, thwart of it you must run close alongst by the west shoare, for to avoid that riffe.

To the northwardes of Hanglip, the land of Hitland lieth north, north and by east, and northnortheast, at last north, and at some places you may saile in through Hitland, especially to the northwardes of Hanglip, where a faire broad Sound lieth northwest through, there is good ancker ground to finde at some places, for those that are there acquainted. From Hanglip to the northeast point of Hitland, the course is northnortheast ten leagues, there lie some outrockes called the Outshares. From thence alongst to the north point of Hitland, the course is north about four leagues.

A little about the east point goeth in a faire haven, called Bloemfound, lying in southwest. On the west side lieth a long rock, you must saile into the eastwardes of it, and ancker a little within the haven, it is there within all cleane sand ground, and good lying. Bloem found lieth in first (as hath been said) southsouthwest afterwards south, and south and by east, on both sides is good ancker ground, there you may saile altogether through, and come out againe through Ilesfound into sea, about the Iland Fetlo.

Of the tydes, and course of the streames.

IN Hitland within the havens and sounds a southsouthwest and northnortheast moone maketh full sea. The flood runneth there to the eastwardes and the ebbe to the westwardes, especially at the south end and north end of Hitland, and so fall thwart through the Sounds and havens.

How these places doe lie one from the other and from other lands.

From Fairehill to the northeast point of Orcanays south-west	9 or 10 leagues.
From Fairehill to the southend of Hitland southsouthwest, and south and by west	7 or 8 leagues.
From the south end of Hitland to the Iland Rona west-southwest	46 leagues.
From the north end of Hitland to the rockes of Rocol westsouthwest	127 or 128 leagues
From the south end of Hitland to Fero westnorthwest, and northwest and by west	61 leagues.
From the north end of Hitland to the south end of Fero west, and west and by north	58 leagues.
From Hitland to the east point of Island the course is north-west and by west about	130 leagues.
From the north end of Hitland to Gryp northeast and by east	125 leagues.
From Hitland to Stadt eastnortheast	69 leagues.

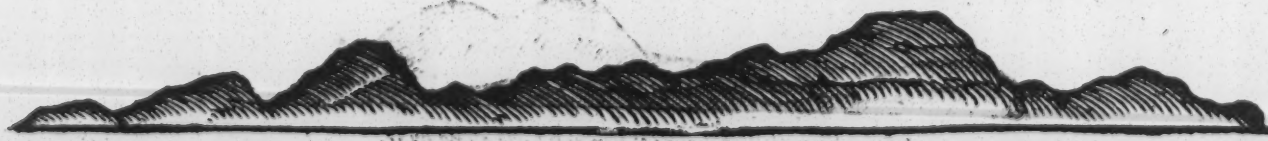
Heights of these lands.

THE south end of Hitland lieth in nine and fiftie degrees 48 minutes.
The north end of Hitland lieth in 60 degrees 45 minutes.

How these lands doe shew themselves at sea.

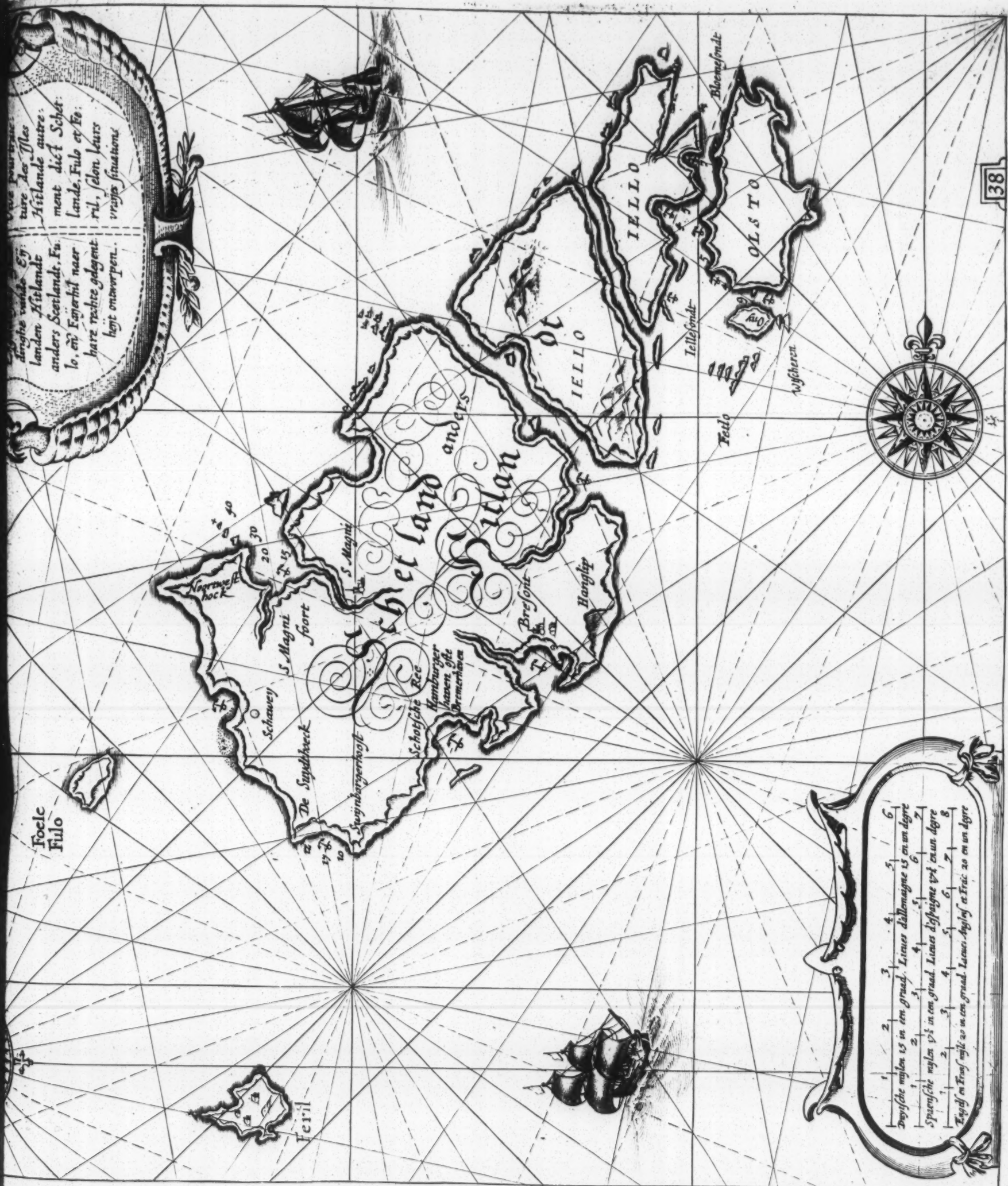


When Fairehill is southeast, and southeast and by east three or four leagues from you, it sheweth thus.



When Fairehill is west and by south three or four leagues from you, it sheweth thus.

Fulo



Duytsche mylen 15 in een graad. Lincos dalmagne 15 in een degre
Spensche mylen 15 in een graad. Lincos dalmagne 15 in een degre
Tweyde in Frans mylen 20 in een graad. Lincos dalmagne 15 in een degre



Five leagues to the northwards of Hanglip the land sheweth thus, being about a league off from it, Hisland lieth in there with a great bight, with manie Ilands.

Bremerhaven.

Point of Broad sound.

Hanglip.



In this forme sheweth Hisland, betwixt Hanglip and Hamburger haven.



Thus sheweth Hisland, when it lieth northvest and by west about foure leagues from you.



When Fulo lieth northnorth east foure leagues from you it sheweth thus.



Thus sheweth Hanglip, when it is northvest from you eight leagues.



When as the north end of Hisland is southeast and by east from you, then it riseth thus.



Fairehill being five leagues southvest and by west from you sheweth thus.



When Fulo is northvest from you so far, that you may even see it out of the top, it sheweth thus.

C H A P. VIII.

Of the Ilands of Fero, or Ferre.

Names of
the Ilands
of Fero.



He greatest and chiefeft Ilands of Fero are twelve in number; as Suydro, Sando, Moggenes, Wage, Stromo, Ostro, Calso, Cuno, Bordo, Wydro, Swyno, and Fulo.

The little Ilands of Fero are tenne, as little Dymen, Stoerdymen, Schuyvo, Dalsfles, Hesten, Trallo Colster, Moggenesholme, the Monck, and the Bishop. Besides these there are yet some rockes and little Ilands, to seven or eight in number.

Suydro.

The southermost great Iland called Suydro lieth most southeast and northwest, about seven or eight leagues. At the southeast end of this Iland lieth a high rock, called the Monck, or Sombie, after the name of the first or southermost haven in Suydro. Betwixt the Monck and the southeast end of the Iland Suydro, is a tace or well, which men must avoid especially with spring tides.

Monck,
Sombie.

Vpon the west side of the Iland Suydro are no havens for to save anie shippes in, but it is altogether high steepe land. On the north side are manie havens, where men may saile into and save shippes, as Sommerfound or Hest, Hofwyke, Vrobie, Quaelbie or Rane, all broad Sounds or havens: a countrie man or Pilot can bring you in there everie where, to your desire.

Moggenes-
holme.

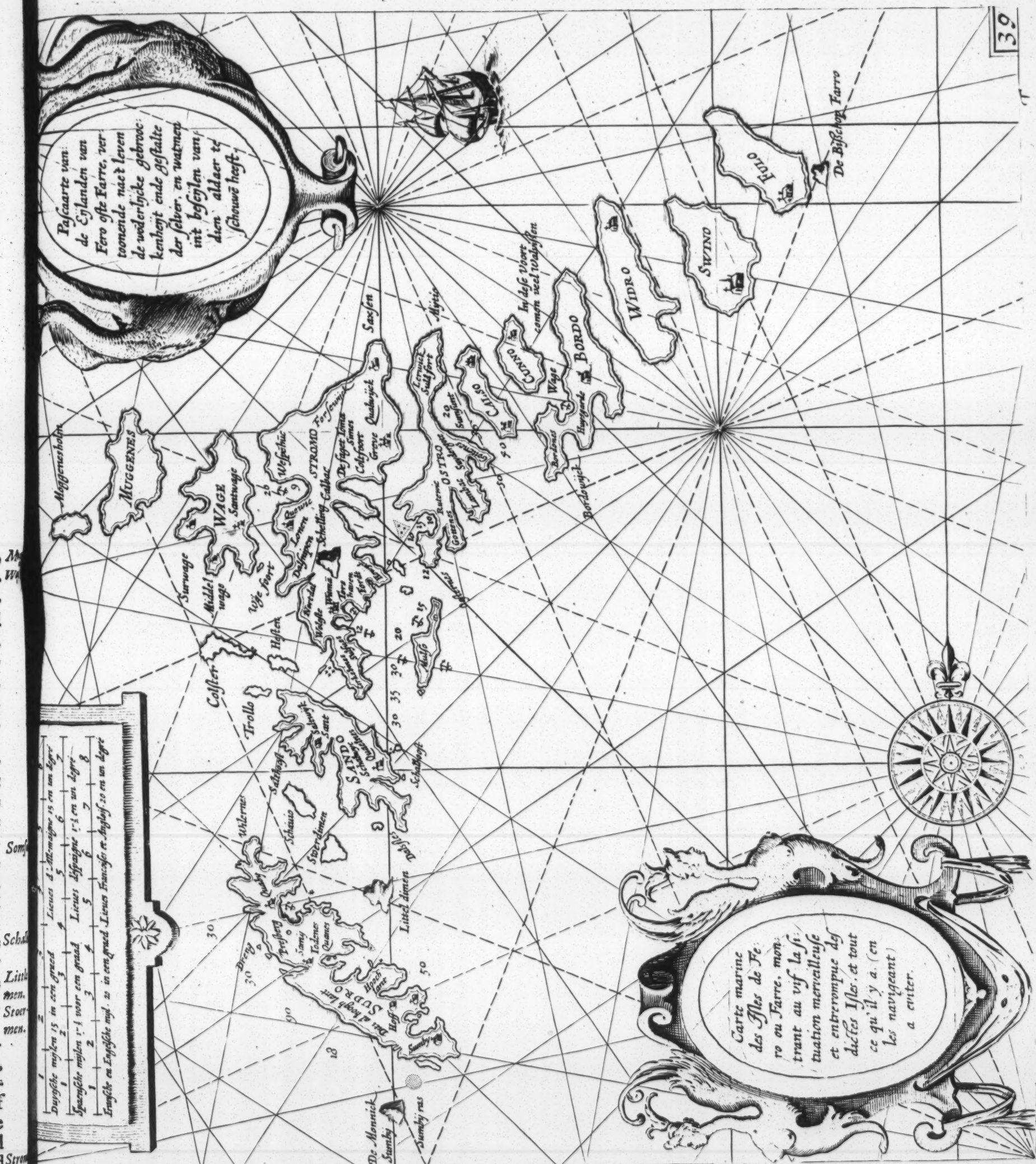
From the northwest end of Suydro to Moggenesholme, the westermost and outermost Iland of Fero, the course is northwest and by north, and northnorthwest about eight or nine leagues.

At the east end of Moggenesholme lieth Moggenes, to the eastwards of it lieth the Iland Wage, and to the eastwardes of Wage goeth in a faire sound from the southwardes, off from the Iland Sando about Hesten and the Iland Colster, for you may run in about these Ilands on both sides, and leave the great Iland Stromo on the east side, and so come into Wage. In the midst of the sound of Wage, goeth up a haven to the eastwardes into the great Iland Stromo, therein you may ancker in ten or twelve fathome, but the sound is at least twentie fathome deepe.

Moggenes and the northeast end of Fero lie eastnorth-east, or a little more northerlie, and westsouthwest about fiftene leagues asunder. Betwixt them both, lie tenne Ilands, and betwixt each Iland, is a faire broad and deepe sound, whereof the fourth off from Moggenes is called Sommerfound. All these sounds lie most northnorthwest and south-southeast through the land, and upon all these Ilands stand Churches, except upon Ostro, which never the lesse is a great Iland.

From the southeast end of Suydro to Schalhead, or the southeast end of the Iland Sando the course is north and by west about five leagues. Betwixt Suydro and Sando lie the little Ilands, Little Dymen, Stoer-Dymen, Schavo and Dalsfles.

From Schalhead untill within the Iland Mulso, (lying before Stromo) the course north and by west four leagues, there you may everie where ancker, where you wil in twenty, thirtie or fortie fathome. If any man comming in out of the sea, desireth to seeke a good road or haven under the Ilands of Fero, he shall keepe that middlemost great Iland Stromo northwest and northwest and by west from him, and then he shall see upon the midst of the Iland Stromo a high



Schellinck, high steepe hill called Schellinck, which he must saile right in with, and so he shall meete with that foresaid Iland Mulso, a low Iland, which you may saile about on both sides, but it is best for to run in there at the south end, under this Iland is all over good ancker ground. Right over against this Iland, on the great Iland, lieth Torshaven, the chiefeest haven of Fero, where all the trade of merchandize is.

Torshaven.

From Torshaven or the Iland Mulso to the northeast end of Fero the course is northeast, and northeast and by east about twelve or thirteene leagues, betwixt them both lie seven Ilands, and betwixt each Iland (as hath been said) goeth a broad Sound through the land: lying through about northwest, northwest and by north, and northnorthwest. The north end of Fero is about four leagues broad, and lieth northwest and southeast, and is called Fulo, thwart of it lieth the Bishop.

Fulo.

The Bishop

He that desireth to saile off from Mulso into Somfound, let him go on northeast and by north three leagues, unto the point of Bordenes, then up northwest off from Bordenes, and then he shall espie a church upon the Iland Calso, which he must leave on the starboard side, and goe in alongst westnorthwest, untill he come into the Bight of the Iland Ostro, and ancker there in seventene or eightene fathome.

These Ilands of Fero ly in a triangle, it is from the south-east end of Suydro to Fulo, or the north end of Fero north-northeast and southsouthwest 21 leagues asunder.

Of the tydes and course of the streames.

IN the Ilands of Fero a north and south moone maketh the highest water.

Vnder these Ilands of Fero goe verie hard tides, with great turnings, the floud commeth there out of the west & westnorthwest, and the ebbe out of the east, and eastsoutheast, and falleth so alongst through the Ilands, there you must reckon your tides thereafter, when you will sail from the one Iland to the other, there are two wels or Maelstreames, the one at the south end of Suydro, and the other a league within Schalhead at Quaelnes.

Although the tides do runne so strong through these Ilands, yet nevertheles it floweth not there four foot up and downe.

How these lands doe lie one from the other, and from other lands.

From Fero to Rona the course is south and by east 45 or 46 leagues.
From the south end of Fero to Rokol southwest westerly 85 leagues.

Heights of these lands.

THe south end of Fero lieth in 61 degrees 15 minutes.
The north end in 62 degrees 20 minutes.

C H A P. I X.

A Description of some Ilands behind the northwest point of Scotland.



*Names of
thes Ilands*

From Scotland westwards and to the northwards of Ireland, ly many Ilands, where of we shall here describe some, with so much perfectnes, as thereof is yet knowne.

The names of the principall Ilands lying there are these: Areu, Ila, Iona, Mulla, Bragedull, Hun, Iust, Lewis, S. Patricius, S. Maria, S. Colane, S. Petous, Eph, and S. Kilda, these are the greatest. There are yet some small Ilands: as Rona, Cheut, Trauta, Fladde, Grand Melul, Petit Melul, Stalpan, Cannay,

Rum, Egghe, Mule, Cutte, Carndenbrough, Gronsay, S. Karbo, Lismont, Swynoy, Machare, Gegay, Caray, and Naverfay. All these Ilands doe lie and belong under Scotland, and are those which by the Cosmographers are called *Insulae Hebrides*.

The Iland Barre or Rona is the northermost Iland lying behind Scotland, and lieth from Fulo about westsouthwest seven and thirtie, or eight and thirtie leagues, it lieth by two other little Ilands about a great league one from the other.

The Ilands of Lewis ly from Rona southwest distant sixteene or seventene leagues, and from the north end of Lewis to S. Kilda it is southwest & by west sixteene leagues.

On the east side of S. Kilda is a good road for a west and northwest winde. This Iland lieth by the other little Ilands, whereof the two are not very great, upon that, which lieth to the westwards, you may see some houses stand, and these two little Ilands lie ten leagues to the westwards of the great Iland of Lewis. Vpon the coast of Lewis ly also two rowes of great rocks, like as if they were little Ilands, lying one from the other south and north somewhat easterly about seven or eight leagues.

The southermost lie by three little Ilands, but the northermost lie by eight smal little Ilands or rocks.

The Iland of Lewis is devided into many parts, the which men may saile through at many and divers places. Lewis with the Ilands belonging to it, ly southsouthwest, and south and by west about nine and twentie leagues.

But on the east side goeth a broad Sound through of five or sixe leagues. Men saile in close by the Iland of Lewis, about southsouthwest, untill past the Iland Cheut.

From thence the Sound lieth through betwixt the great Iland Bragadull and Lewis south, and south and by west towards the west end of Lewis, called the Ephts, then you must leave Mulla and Ila, with divers manie other Ilands on the larboard side.

Iona, Ila, Mulla and Bragedull are four of the greatest Ilands, which are lying on the west coast of Scotland, and ly close by the maine land, but there are many havens and Sounds, so that there you may saile in and about them every where.

At the northwest point of Ireland ly also some Ilands, which you may saile through and round about them all.

Betwixt Rona and Orkneys lie also some Ilands, which also you may saile through betwixt and round about.

He that falleth with these Ilands must be verie carefull & circumspect, for the most part of them are inhabited by wilde and savage people.

In Lewis and the Ilands there abouts a southwest and northeast moone maketh the highest water, and likewise also without the north point of Scotland.

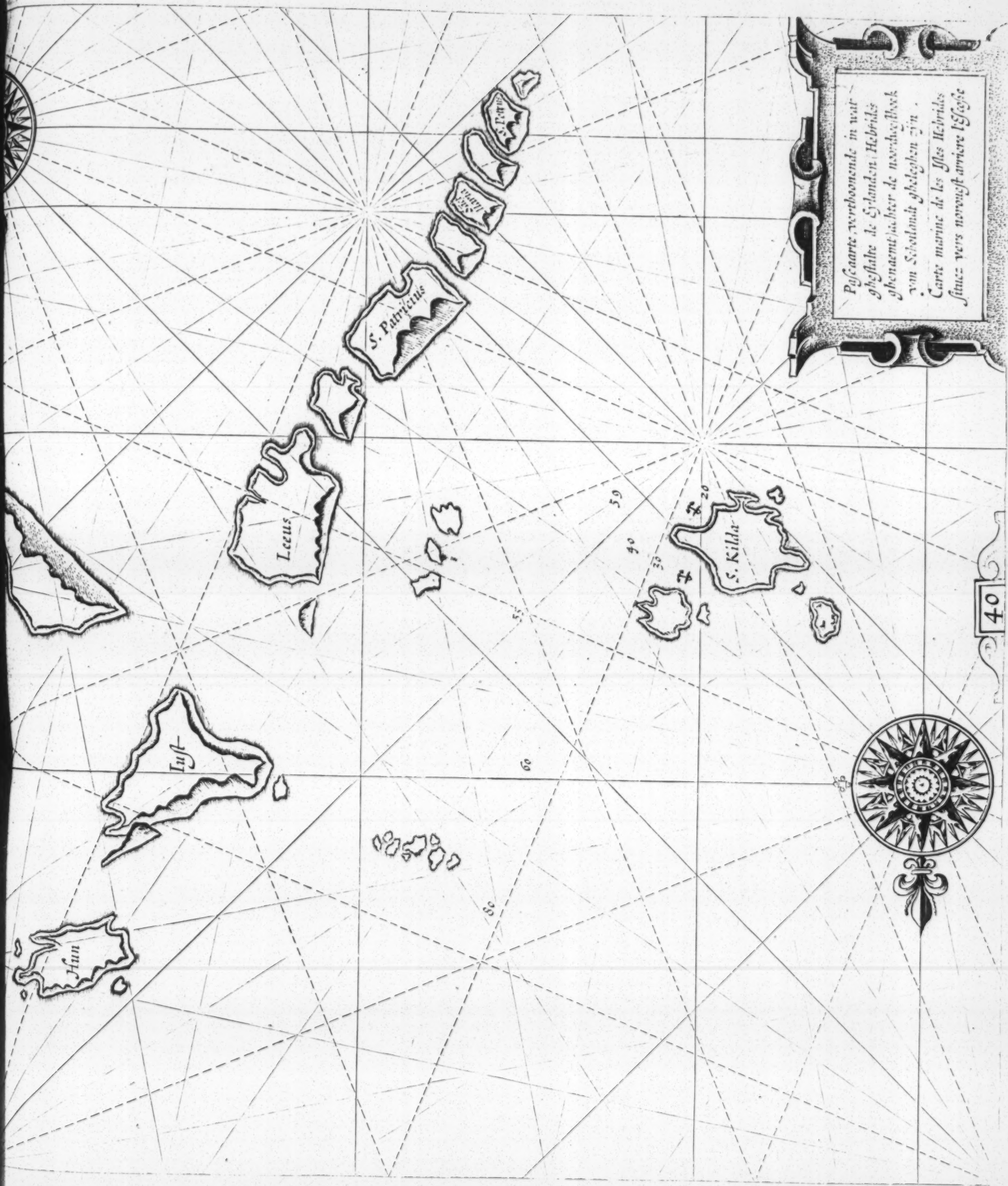
How these Ilands are lying one from the other, and from other lands.

From Rona to Lewis the course is southwest 16 leagues.
From the north end of Lewis to S. Kilda southwest 16 leagues.
From the south end of Lewis to the northwest point of Ireland the course is southsouthwest about 27 leagues.
From S. Kilda to the north end of Hitland northeast and by east 93 leagues.

Heights of these lands.

THe Ilands of Rona ly in 58 degrees 46 minutes.
The north end of Lewis lieth in 58 degrees 18 minutes.
The rock Rokol lieth in 58 degrees 20 minutes.
The northwest point of Scotland lieth in 58 degrees 30 minutes.

How



Pyscaarte, verhoovende in wat
gheslachte de Eylanden Hebrides
ghevaent achter de noordwesthoek
van Schotland gheleggen zyn.
Carte marine de les Isles Hebrides
situee vers le nord-ouest de l'Ecosse

A Description of some Ilands behind the northwest point of Scotland.

How these lands doe shew themselves at sea.



Thus sheweth the Iland Barro or Rona, when it is four leagues s. f. e. from you.



This Iland lieth also upon the coast of Lewis.



When S. Kildayn is s. w. about five leagues from you it sheweth thus.



When the Iland Lewis lieth east 8 leagues from you then it riseth thus, and then you are within S. Kilda.

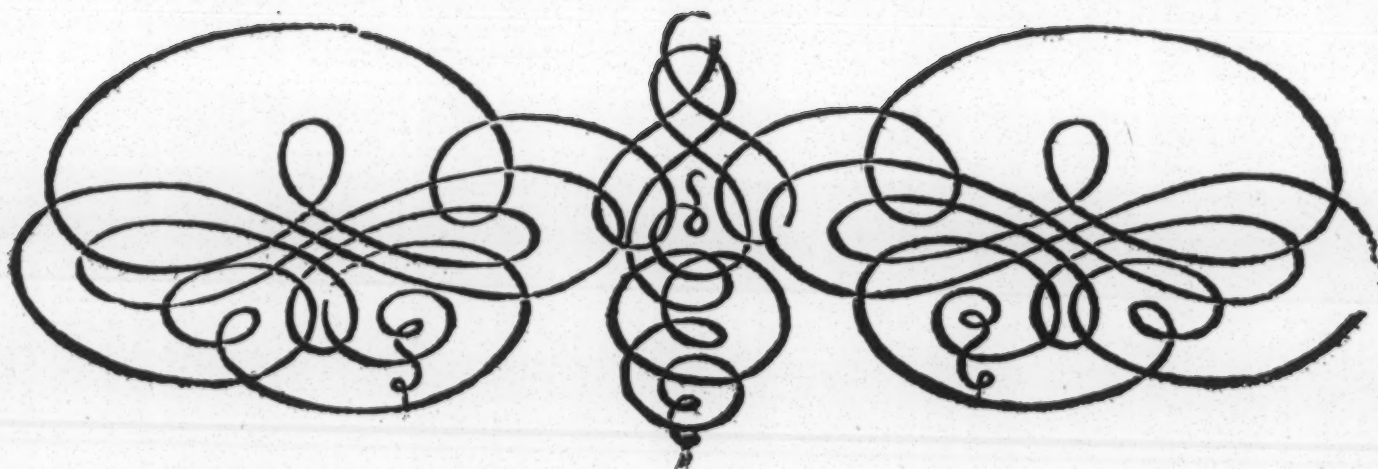


This land lieth on the northvest point of Scotland towards Locherme.



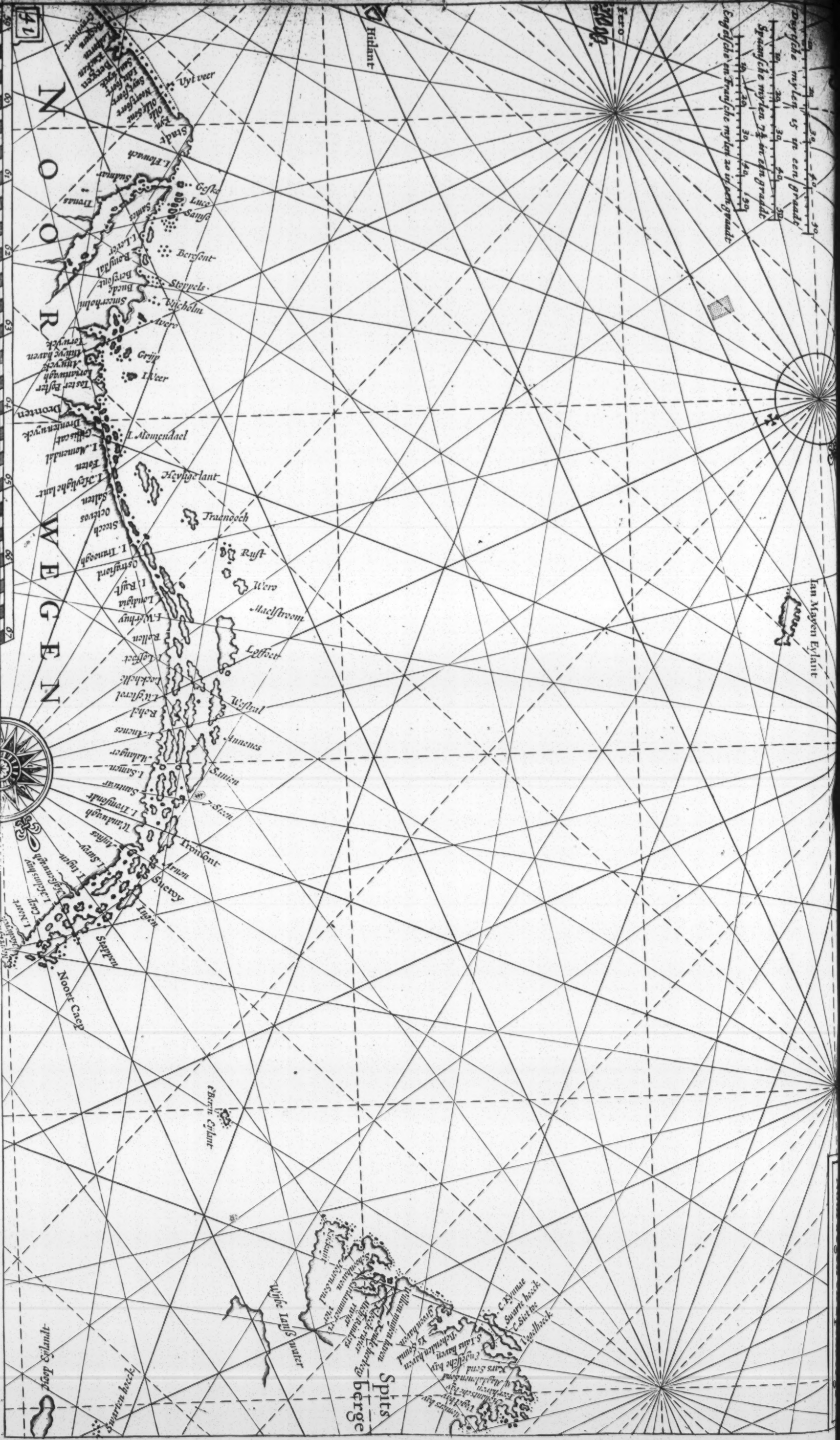
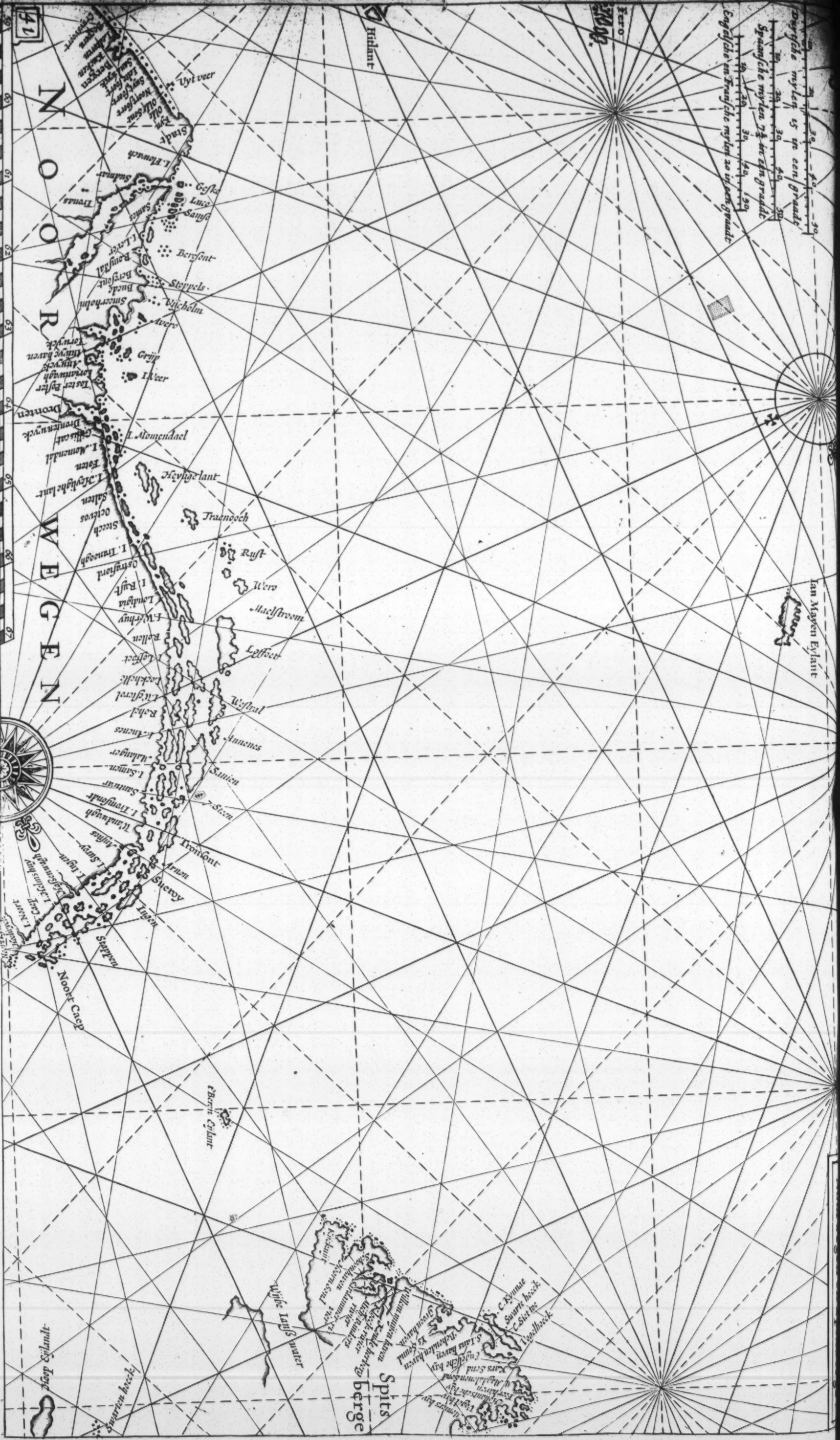
This Iland lieth westfourthvest from Scotland.

The end of the fourth Booke.



The second part
F I F T H B O O K E
of the
S E A - B E A C O N
of the Easterne and Northerne
N A V I G A T I O N,
Containing
T H E D E S C R I P T I O N O F T H E
Seacoastes of Norway.

From derNeus to the North Cape, and of the new
found land of Spitsbergen.



THE
SECOND PART
of the
E A - B E A C O N

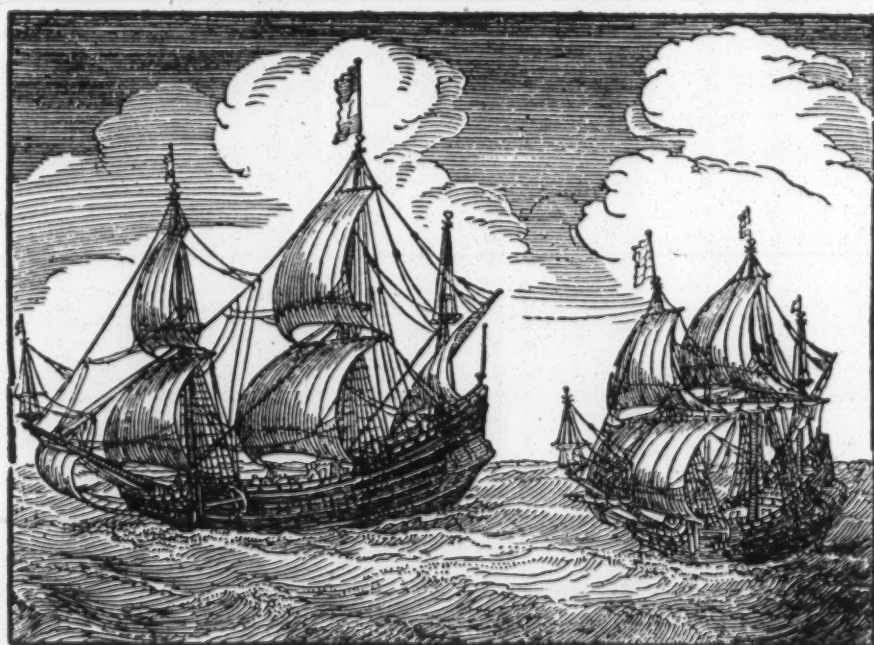
Containing
A DESCRIPTION OF THE
Easterne and Northerne
Navigation;

COLLECTED AND COMPILED TOGETHER
Out of the Discoveries of many Skilfull and expert Sea-men,

BY
WILLIAM IOHNSON BLAEV,

And Translated out of *Dutch* into *English*,
By RICHARD HYNMERS.

Newly corrected of many faults.



AMSTERDAM,

Printed by IOHN WILLIAMSON BLAEV, dwelling upon the Water, by
the Old Bridge, at the Signe of the Golden Sunne-Dyall.

CIO IO CXLIIII.

Cum Privilegio.



Generale
Paschaert vande
Oosterse Noorse
en Westerse
Schipvaart.

Duysche mijlen 15. in een graad.
Engelsche mijlen 10. in een graad.
Fransche mijlen 12. in een graad.
Duytsche en Fransche mijlen 10. in een graad.

THE FIFTH BOOKE of the EASTERNE AND NORTHERNE NAVIGATION,

Conteyning the Description of the Coasts of Norway from
the Naze to the North Cape, and also of the new
found land Spitsbergen.

CHAP. I.

*The Description of the coasts of Norway from the
Naze to Schuytenes.*



Little to the westwards of the point of the Naze ly two havens, New and Old Silloe, or Silieu; some doe call these one haven (like as also men may doe) and distinguish it with an easter and wester gat or haven, for men can goe with boats through within the rockes from the one into the other, but not with great ships.

For to saile into the Easter gat, or New Silloe, you must take heed of the Bishops Boeden, which are a few out-rockes a little to westwards of the point of the Naze, right before the middest of the sound, leave them on the larboard side, and saile in alongst by the land of the Naze, untill you come somewhat within the foresaid Bishops Boeden, and then you shall finde there also a suncken rock, which you must avoid, run about to the northwards of it, and edge then up to the westwards behind the Iland of New Silloe, and anker there against the white church within the foresaid rock.

For to saile into the Wester-gat, or Old Silloe, you must run about to the westwards of the out-rockes and Bishops Boeden, and saile right with the south end of the land of Leeft; being come by it, run to the eastwards alongst by it, but take heed of some rocks, which ly off from the innermost Iland on the starboard side; being there within, anker against the Iland, where you please.

From the Naze to the Iland Hitteroe, or Hittereu, the coast lieth alongst the land of Leeft westnorthwest five leagues. To the southwards or the westwards of that Iland men doe saile into the haven of Winfoord, which lieth in northeast, but to the northwards of it men doe run into Bergsfound, eastnortheast in betwixt the Iland and the land.

In that Iland is also a good haven, which you must saile into from the northwards, the havens mouth is not very wide, when you are come in within it, you may edge up to the eastwards or southwards, and anker.

Two leagues to the northward of Hitteroe lieth a haven called Sogghendall, there lieth a little Iland before it, within men may anker, it is a good road for them which are bound to the southwards. Betwixt them both not farre without the land, ly two out-rockes alongst the shoare, called the Fock-stones, the one lieth a little more to the seawards then the other.

A league to the northwards of Sogghendall lieth Ekesound, before it lieth an Iland, which you may saile into on both sides of it, the southergat lieth in northeast; being come in there, you must anker on the north side of the haven in a bay, there is the best road in eight, or nine fathom, the norther gat lieth in to the eastwards; being come in there, you may anker at divers places. A league to the northwards of Ekesound lieth a haven called Sierowach. For to saile in there comming from the northwards; you must run in right with the southermost sand-bay, untill you come close by the shoare, and then the haven doth open it

East. Water. v. Booke.

selfe, loof up close alongst by the east side, untill you come by the north shoare, then run up by it to the southwards, & avoid the west point, thwart of it lieth a suncken rock twelfe foot under water; being there within, let your anker fall in seven or eight fathom, & bring a cable on the west shoare, there you shall lie landlockt for all windes. This is a good haven for those which are bound to the northwards.

To the northwards of Sierowach lieth the land the Iedder, which lieth from Sierowach first northwest & by north two great leagues to the point Walbert or Mids-Iedder, & then north four leagues, which is altogether a cleane whole coast, without any dangers, or havens, except at the very north end, from which runneth off a little riff northwest into sea, towards the Veetstone.

The Veetstone is a great rock lying about two leagues without the land, lying northnorthwest from Mids-Iedder five leagues, betwixt them both, a great league to the southwards of the Veetstone, ly some low black rockes called Rut. When as you saile from Mids-Iedder on northnorthwest towards the Veetstone, then the Veetstone doth shew himself, very round, like a haycock, and sailing so, you might lightly fall with the foresaid rocks of Rut; but being a little more to seawards, the Veetstone sheweth it selfe a little longer on the west side, then you cannot take hurt of the rocks of Rut.

About two leagues northnorthwest from the Veetstone lieth an Iland, whereupon standeth a church called Whittings-ey, but northnortheast from the Veetstone four leagues, lieth another Iland before the Sound of Stavanger called Sibrichstone.

If you will saile into Stavanger comming from the southwards, then saile through betwixt the Veetstone and the maine land, leaving also the foresaid rocks of Rut lying on the starboard side, but you must take very good heed of that little stone-riff which lieth off from the north end of the Iedder; saile in so untill that the Veetstone doe ly south-west from you, then goe in northeast towards the point of Tongenes, which is a long point and low land on the south side of the Sound.

When as you saile now from the Veetstone towards Tongenes, then you shall see that Iland Sibrichstone before the Sound, which doth shew it self in two parts, leave that on the larboard side, and saile in by the point of Tongenes, but there lieth a rock off to the northwards from the point: sail through betwixt the rock and the point, about east, or east-southeast into Doefwyke; when you are within the castle of Doefwyke, there you may anker. But if you will saile in further before the town of Stavanger, then leave the Diefholme on the starboard side, and saile in southeast, and southsoutheast before the towne, and anker there where you please.

But when as you come from the northwards, and will saile to Stavanger, then run through betwixt the Veetstone and the Whittings-ey, and then goe on northeast towards Sibrichstone, and the point of Tongenes, and doe further as hath been before taught.

From the Veetstone to Schuytenes the course is north-

*Walbert or
Mids-Ied-
der.*

Veetstone.

Rut.

*Whittings-
ey.
Sibrich-
stone.*

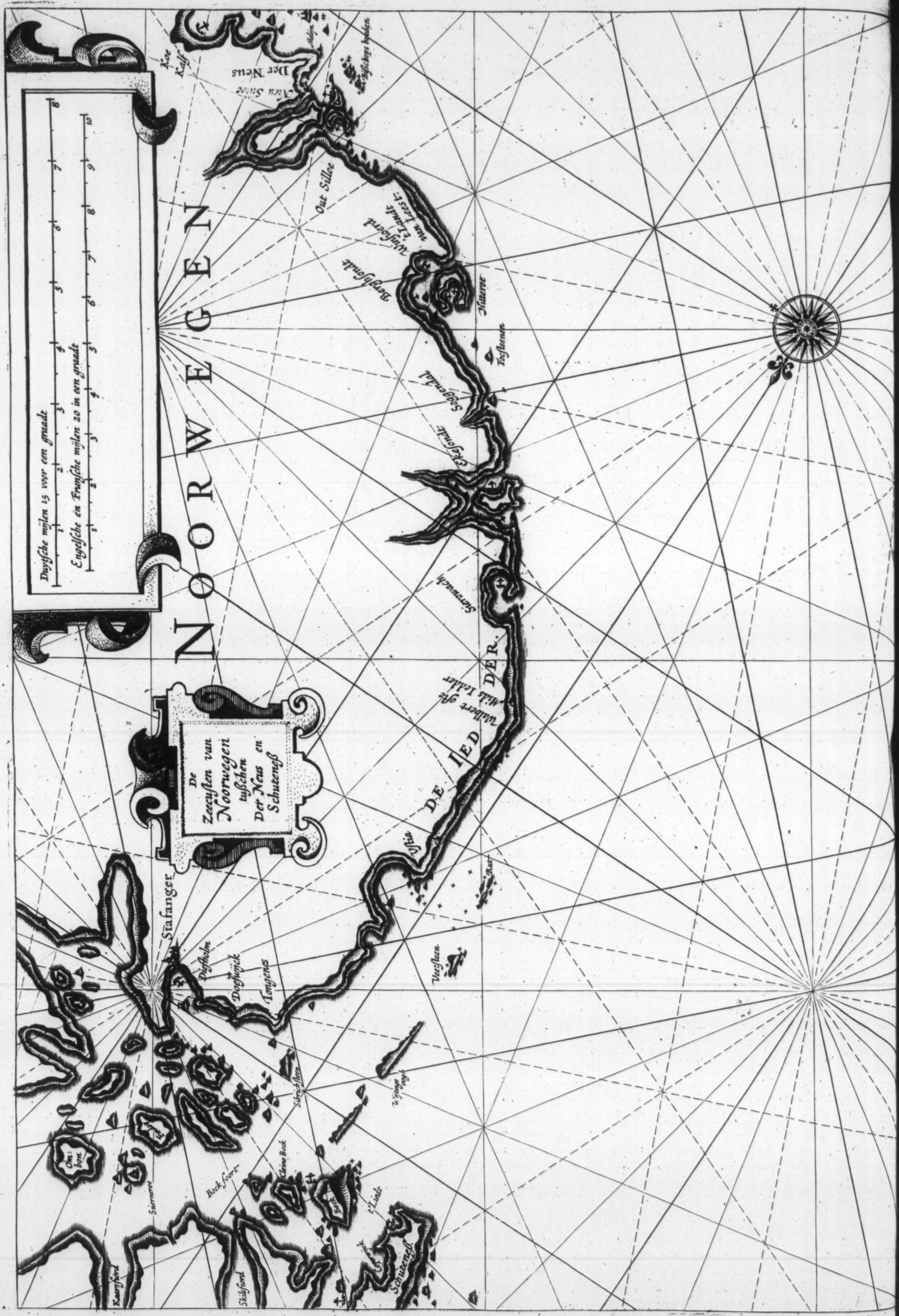
Tongenes.

Doefwyke.

Stavanger.

Q

north-



Duytsche mijlen 15 voor een graadt
Engelsche en Fransche mijlen 20 in een graadt

NOORWEGEN

De
Zeeuyten van
Noorwegen
tusschen
Der Neus en
Schuteneß

DE IED DER

northwest 5 leagues: but from Schuytenes to Sibrichstone through betwixt Whittings-ey, the course is east 5 leagues.

Four leagues west, and west and by north to seawards from Schuytenes ly the Rocks called the Outseers.

Of the Tydes and course of the Streames.

ON these coasts of Norway off from the Naze, untill past Berghen unto Stade, the water riseth and falleth, but keepeth no certaine tyde: but from thence towards Dronten, and to the northwards of it, it keepeth tyde according to the moone, lyke as in other places.

How these places doe lie one from the other and from other places.

From the Naze to Hitteroe the course is westnorthwest 5 leagues.

From Hitteroe to Ekefound the course northwest 4 leag.

From Ekefound to Sierowach northwest and by north 2 leagues.

From Sierowach to Mids-Iedder, northwest and by north 2 leagues.

From Mids-Iedder to Rut the course is northnorthwest 4 leagues.

From Rut to the Veetstone north and by west a league and a halfe.

From the Veetstone to Sibrichstone northnortheast four leagues.

From the Veetstone to Schuytenes northnorthwest five leagues.

From Sibrichstone to Schuytenes through within Whittings-ey west 5 leagues.

From the Naze to the Outseers the course is northwest 29 leagues.

How most of all the places on the north sea do ly from the Naze both in courses and distances of leagues, is described in the first chapter of the second Booke.

Of the heights of these lands.

According to the record of the Readcards, the point of the Naze shold ly in the height of 57 degrees 40 minutes.

The Iland Schuytenes in

59 degrees.

How these lands doe shew themselves at Sea.



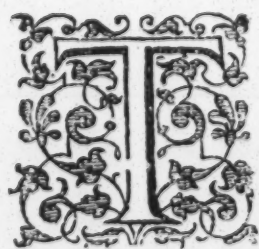
Thus sheweth the land of the Iedder when it is northeast five leagues from you.



Thus sheweth the land of the Iedder when it is eastnortheast five or six leagues from you.

C H A P. I I.

How men shall saile up into the Liet of Berghen.



HHe Liet of Berghen goeth in betwixt the Iland Schuytenesse & Bock. Schuytenesse is about four leagues long, at the south end ly some suncken rocks and fowle grounds; for to avoid them comming in out of the sea, you must keep the top of Bock a little without the point of Schuytenesse, & then you shall goe cleare of them; but if you bring Bock close by or to the point of Schuytenesse, & saile so right in for to run about close by the point of Schuytenesse, you shall surely faile upon those foresaid suncken rockes and fowle grounds.

From the south end of Schuytenesse, the Liet lieth in first north and north and by west two leagues to the great Warder, which is a road so called after four great Warders which stand there thwart of it upon the land of Schuytenesse, for the knowledge of this road: there ly commonly the ships that tarry for a wind, being bound either to the northwards or to the southwards, there it is very good lying in five, fixe, seven, or eight fathom, as well for northerly as southerly windes, you may also ancker to the northwards of the Warders about a point in five, fixe, eight, ten and twelve fathom, there you shall ly landlockt for southerly winds.

A little to the southwards of the Warders lieth a bay called the Coperwyke, within it is also a good haven for them which are bound to the eastwards, and will set saile with a westerly winde: with an easterly or northerly wind, you cannot wel shift roads from thence or come out. At the

comming in to this bay lies a suncken rock called the Coperpernaile, upon it standeth alwayes a great Pole, whereby you may see to avoid it.

Without at the south point of Schuytenes on the east side is also a little bay or two, where men may ancker.

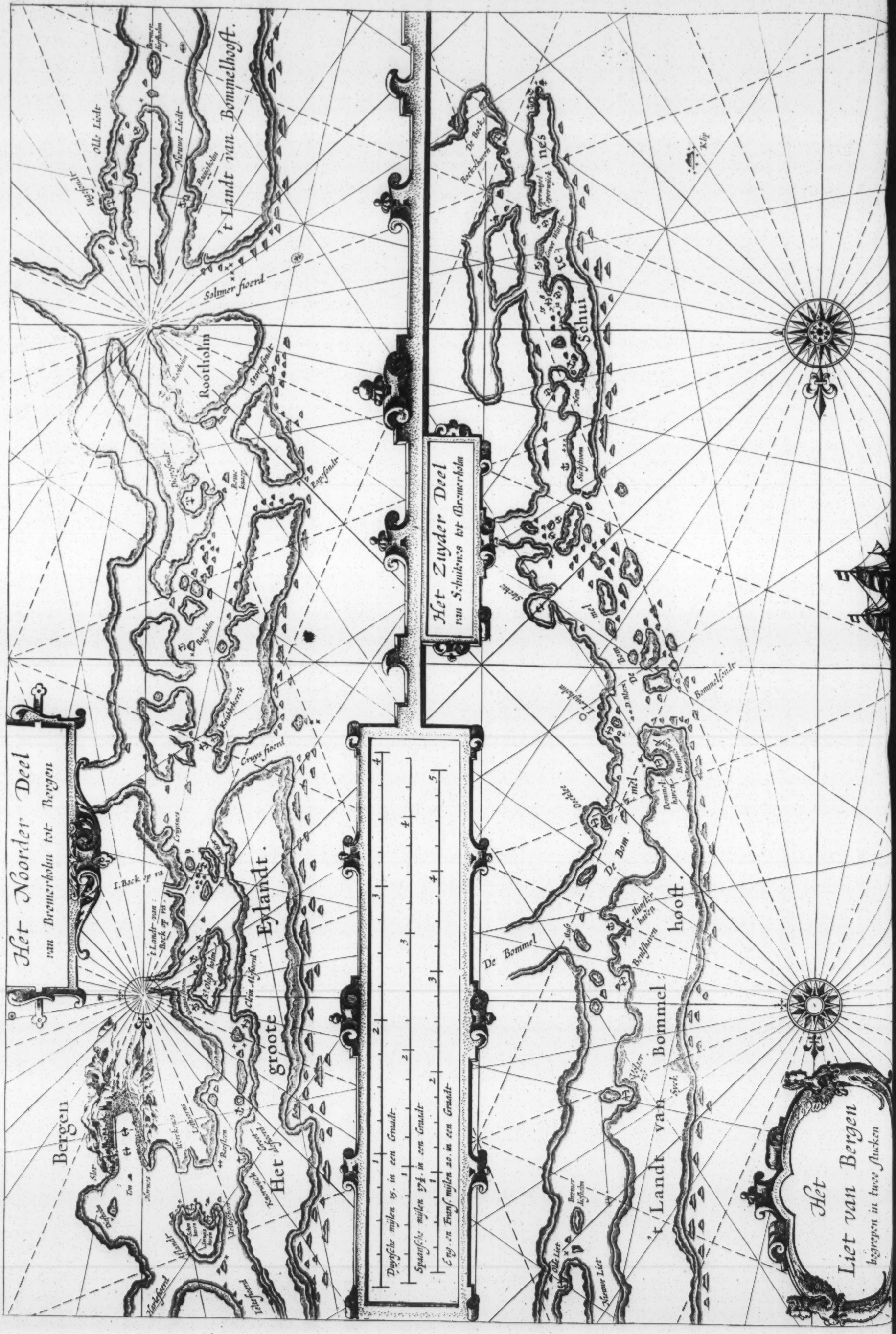
A little to the northwards of Bock, on the east side of the Liet is also a Bay called Bockhaven, where men may come to ancker.

All these roads, as also the Copperwyke, are good for those which comming from the southwards, by reason of contrary winds cannot get to the great Warder.

A little more southerly then the Coperwyke, on the east side of the Liet to the northwards of the Bock, lieth in north into the land, a Sound, which sheweth it self (when you com from the southwards) much broader then the right fare-way, so that those that are not there very wel acquainted, shold not think otherwise, but that it was the right channell, and so shold lightly go up a contrary way. Therefore it is necessary and needfull to saile close alongst by Schuytenes, and not goe off from the west shoare, untill you com thwart of Kopperwyke, then you shall bee within the point of the foresaid Sound.

About a great half league by north the great Warder, lieth Notou, there standeth a little white church and some houses, thwart of it in the Bay is also good anckering for northerly winds, and good road for them which are bound to the northwards. Likewise it is good anckering by north the point of Notou, for them which are bound to the southwards. Almost at the north end of Schuytenesse is also a road called Sichstreame, where is also good lying.

At the north end of Schuytenesse lieth a little Iland, when you saile up or downe the Liet, you can see through betwixt them



Het Noorder Deel
van Bremerholm tot Bergen

Het Zuyder Deel
van Schuilen tot Bremerholm

Het
Liet van Bergen
begrepen in twee Stucken

Duytsche mijlen 15. in een Graadt
Spaanfche mijlen 17 1/2. in een Graadt
Eng. en Frans. mijlen 20. in een Graadt

them into the sea. At this Iland is also a good road under a rocke, or little Iland, called Wybrants-ey, there it is good anckering for all winds.

Betwixt that foresaid Iland and the maine land you must saile through a narrow strait, which is but a little more then a shippes length broad; on the east side whereof, which is on the side of the maine land, there lieth a little rock, or funcken rock, therefore you must sail close by the west side, that is close alongst by the Iland for to avoid the foresaid rock.

From Wybrants-ey over the Bommell to the Blocx, the course is n. n. w. but first somewhat more westerly about two leagues, betwixt them both it is on the west side all broken land, great and little Ilands and rockes. About half wayes betwixt them both goeth a channell into sea, where men doe saile much in and out, and it is cleane, broad and wide. He that will run out there (comming from the northwards) may easily espy it, when he is about a half league past the Blocx. On the west side ly two little Ilands, or great rockes, which shew much greater then the other rockes, these you must leave on the larboard side, and run out by them southsouthwest into the sea.

Hee that will runne in here out of the sea, hee shall (when hee commeth to the end of Schuytenesse) see many little Ilands or rocks, hee must saile past all these, untill that hee get sight of these foresaid two great rockes, and then in by them, leaving them on the starboard side; and so he shall come somewhat to the southwards of the Blocx, or Longholm into the Liet.

The Blocx are two rockes lying very neare even with the water, which you must leave on the larboard side in sailing up, and runne close alongst by the east shoare, through betwixt the Blocx and Longholm. Longholm lieth a little above the Blocx, within it is a good haven, where is good lying. A little to the northwards of it ly two rockes more, thwart of them lieth a funcken rock which you must avoid.

From the Blocx alongst over the Bommell it is yet two leagues, first n. & then n. n. e. all alongst by the land of Bommellhead, the south end of this land is a high steepe point called Bommellhead, to the southwards of it runneth a channell w. f. w. into the sea called Bommell-sound. This channell is good for to know comming in out of the sea. The land of Bommell-head is about four leagues long, and the first long Iland to the northwards of Schuytenesse, it is altogether low plaine land, except on the south end, which is so steepe a point, as if it were hewen right off with an axe. About the middest between both ends of this Iland (on the sea side) lieth also a very high round hill called Sick, of fashion almost like a sugerloafe, or a mans hat, & lieth farre above all that low land, which you may easily see at both the ends of this Iland, and also further, whereby it is very good to be knowne. For to saile into this foresaid channell out of the sea, you must bring that steepe point of Bommellhead eastnortheast, or somewhat more northerly from you, and saile then towards it. And then you shall leave a great many little Ilands and rockes on the starboard side, and the foresaid point on the larboard side, and close in about by it to the northwards.

A little about this point of Bommell-head, on the Inner side, lieth a haven called Bommell-haven, ther lieth a rocke before the mouth of it, and also a funcken rocke betwixt that rocke and the north point of the haven: Hee that will goe in there must goe in to the southwards of the rock, in by the south point and the foresaid rock, leaving the rock on the starboard side of him. So soone as men are within the haven, they must let fall their ancker within it is broad and wide and men ly there landlockt for all winds.

At the end of the Bommell lieth Munsterhaven in the land of Bommell-head, on the west side of the Liet, even about the point. This is also a good haven for them which are bound to the southwards, & by reason of contrary winds cannot get further; there standeth a little white Church, thwart of it men must ancker in ten or twelve fathom.

From Munsterhaven to Beulshaven it is north an English mile, there is also good anckering for southerly windes, further it is north somewhat easterly to Volger-road, before it

lieth a little Iland, under it or by it, on the one side or other men may ancker for all winds. Men may also saile round about it, and run in and out at both sides of it, if they will.

From Munsterhaven to Bremerholm the Liet lieth north somewhat easterly about two leagues, there the Liet is divided into two parts, to wit, into the Old and the New Liet: the old Liet goeth through to the eastwards of Bremerholme and the Iland that lieth to the northwards of it, but the new Liet alongst to the westwards of it.

The Olde Liet is not well to be used by them which are not there very well acquainted, also great ships that draw twelve or thirteen foot, may not goe through there.

Somewhat more then thwart of the middest of Bremerholme, in the narrow of the Old Liet, lieth a showld whereupon is no more then thirteene or fourteene foot water. A little to the northwards of it on the east shoare lieth a bay called Inghefound, where is good anckering: there lieth also a bay on the west side, halfe waies betwixt that foresaid showld and Bremerholm where men also may ancker.

The New Liet is broad and deepe enough. Thwart of Bremerholme, in the farewaie, nearest the west side, lieth a funcken Rocke, whereof you must take heed. For to avoid it, you must marke the Iland before Folgher-road. If you keepe it so that you may see it without the north point of Folgher-road, then you cannot come too neare that funcken rock: but if you bring that Iland behind the foresaid point, so that you cannot see it, you shall without faile saile right upon it; you must observe these marks as wel in sailing up, as in sailing off.

In the middest of the Newe Liet lieth Ruygheholme, there men lie with shippes fast unto two Rings: the one is upon the Iland, and the other upon the point to the northwards of it, where they bring out Cables too.

From the new Liet to the point of Redholme it is north-northeast a halfe league, betwixt them both goeth out the Soltmerfioerd westsouthwest into sea, which is a faire broad and large channell. On the south side ly some funcken rockes, but if you runne out amid the channell, you can take no hurt of them.

At sea men doe knowe this Soltmerfioerd by that foresaid high and round hill Sicke, which is verie good to be knowne, & lieth two leagues to the southwards of it, about halfe waies betwixt this Sound and Bommell-sound. The land on the south side of Soltmerfioerd towards Sick, are small white rockes, which you must leave on the starboard side, and runne in so amid the channell eastnortheast, and then you can take no hurt of those foresaid funcken rockes lying on the south side of this channell. There lieth also a funcken rocke at sea before this Sound on the south side, a little off from the north point of the land of Bommell-head, with hard windes out of the sea, the sea breaketh very much upon it, but it lieth at least five or six fathom under water.

When as you come in here, you have Redholm on the larboard side, and you must run northeast alongst by it, untill you come about the foresaid point.

From the point of Redholme to the narrow it is north, & through the narrow northnorthwest and north and by west at least a halfe league. In this strait it is so narrow, that you can but even turne through it, on the west side of the strait lieth a little Iland, thwart of it is good ancker ground in thirteene and fourteene fathom.

From the strait to the Reine Knaep the course is north-west and by north two leagues: this is a little Iland without trees, cleane round about, which you may saile about on both sides.

Thwart of Reine Knaep on the east shoare lieth Deepe-sound, a good haven for them which are bound to the southward, the mouth of it is narrow, and also but three fathome deepe, but within it is broad and large, and twenty fathome deepe. Alongst to the westwards of the Rein Knaep it is broadest, to the eastwards lieth a point, and by it a little Iland, you may sail through betwixt the point and the little Iland.

From the Reine Knaep to Bagholme the course is north and by east a great league. betwixt them both ly some

Ilands and rocks, all which you must leave lying on the starboard side, there you may at divers places saile through & within these Ilands and rockes and at last come out againe by Bagholme into the Liet, but it is not to bee done but for them that are there extraordinary well acquainted. Men might lightly get in amongst these Ilands and rockes, so that they should not know how to come out againe. At the east side of Bagholme men may ancker, but there shooteth off a little ledge of rocks from the north end, whereof they must take good heed.

Crabkerck. From Bagholme to Crab-kerke it is north about three quarters of a league, this is an indifferent haven for southerly winds, but it is little, there can ly no more then two or three shippes.

North Drommels. From Crabbe-kerke to Bock up Ra, it is north somewhat easterly a league, betwixt them both runneth out the Crosse-sound, or Cruysvoert westsouthwest, and southwest & by west into sea, which sound is verie good to be knowne at sea, by three hills (almost like the Drommels on the east side of Norway, but not so high) which ly there abouts within the land, which are also called by some the north Drommels; when they are northeast, or there abouts from you, then you are open before the Crosse-sound. Before the mouth of it lieth a little Iland nearest the south side, from which lie off some rockes to seawards, the broadest & largest channell is alongst to the northwards of it, you may well also saile through to the eastwards of the Iland betwixt it and the land, but there it is narrow, yet cleane and cleare without any dangers. When you are within it, you must go in alongst e.n.e. & n.e. & by e. & so shal come into the Liet against Cruysnes, a little to the southwards of Bock up Ra.

Bock up Ra. Bock up Ra is a little Iland which you may saile about on both sides alongst to the westwards of it is the common farewaie, and also deepest. When as you saile about to the eastwards of it, and come to the north end of Bock, there it is verie narrow, and there right in the farewaie (somewhat nearer the east shoare then Bock) lieth a suncken rock, there standeth alwaies a pole upon it, for to avoid it, you must leave it on the starboard side, and runne alongst to the westwards of it. Betwixt this Rock and Bock it is no deeper then sixteen foot. Right to the westwards thwart of Bock lieth an other Iland, under it you may also ancker in Bock-liet. To the westwards of this Iland goeth through the

Cobbelier. Cobbelier, which men doe saile through with bare winds, or when they must turne through, because it is broader then on either side of Bock up Ra.

Wating streame. From Bock to the Wating-streame it is north a league, there you cannot saile amisse. If you doe not saile against the land; for there lie no dangers, except at the west shoare lieth a suncken rock close by the land, whereupon remaineth at low water about tenne foot water. Vpon the end of Wating-streame the course is northwest about a shot of a cast peece, or a quarter of a league, and then you come

Little Ale-fjoerd. thwart of little Alefjoerd, which is a haven on the west shoare, where is good anckering both for a north and south wind, under a high round Iland, where you shall lie land-

Reefstone. lockt. From thence to the Reefstone it is north about two leagues, betwixt them both on the west shoare lieth great

Great Ale-fjoerd. Alefjoerd, which is also a haven both for northerly & southerly winds, thwart of it, the farewaie is about two musket shots broad. The Reefstone is a rocke under water lying by the point, where the two high hills stand, which men doe call the Lethoorns: these are two high sharpe hilles, which men may see farre off, as they saile up or off that Liet. Vpon the Reefstone standeth alwaies a Pole, that thereby men may avoid it. You may also saile alongst to the eastwards of it; but to the westwards of it, it is broadest, and the right

Knorwyke. farewaie, over against it on the west shoare lieth Knorwyke, a haven where men may also ancker.

Werckenes. From the Reefstone to Werckenesse the course is east-northeast about a quarter of a league, and then you leave the Iland Asland lying on the larboard side to the northwards of you, in it ly also two haveus where you may also go to ancker, the one called Struys-haven, and the other Schoon-haven. To the westwards of Asland you may saile

to Ieltesfoerd, and runne out there about northwest into the sea.

When you come out of the sea into Ieltesfoerd, then you come in to the westwards of Asland against the Reefstone into the Liet.

At the south point of Asland lieth Ielteschaer, a little round Iland, or rock, whereupon standeth a great Iron ring, when as men come up the Liet, and with calmes are in danger to bee driven with the current to the northwards alongst by Asland, then they bring with the boat a cable fast on it. Men may wend round about the foresaid rock without any danger.

From Werckenesse to Horneffe it is east a little distance: when you come by it, you may see the town of Bergen lie before you, you must ancker before it in the Wage, in 11, 12, or 13 fathome.

To the northwards of Asland lieth the Iland Harle, which is about five leagues long; when you come from the northwards, you may runne about it on both sides, and so come into the Waghe of Berghen. The Harlefoerd goeth out about north and by west, and northnorthwest betwixt Asland and the land of Harle.

How these Lands doe lie one from the other, and from other Lands.

From Scuytenes to Bommells-head n. n. w. somewhat northerly 7 leagues.
 From Bommells-head to Cruysfoort n. n. w. 9 leagues.
 From Cruysfoort to Harle northnorthwest 13 leagues.
 From Scuytenes to the Outseers west, and west and by north 4 leagues.
 From the Outseers to Ieltesfoerd, or the Waghe of Bergen north and by west 26 leagues.
 From Scuytenes to the Flie south and by east southerly 160 leagues.
 From Scuytenes to the Tessell south, and south and by east 112 leagues.
 From Scuytenes to Walcheren south 122 or 124 leagues.
 From Scuytenes to the Holms before Yarmouth south and by west, or somewhat more westerly 113 or 114 leagues.
 From Scuytenes to Flambrough-head southwest and by south 104 or 105 leagues.
 From Scuytenes to Tinmouth the course is s. w. 104 leag.
 From Scuytenes to Boockenes west and by south southerly 72 leagues.
 From Scuytenes to Hitland west and by north, and west-northwest 66 leagues.
 From Scuytenes to the north end of Hitland westnorthwest somewhat northerly 71 or 72 leagues.
 From the Outseers to the Flie south and by east 103 or 104 leagues.
 From the Outseers to the rockes Outweers north and by west 40 leagues.
 From Ieltesfoerd or the Waghe of Berghen to Hitland west 48 leagues.
 From Ieltesfoerd, or the Waghe of Berghen to the north end of Hitland west and west and by north 50 leagues.
 The Waghe of Berghen lieth in the height of 60 degrees 15 or 20 minutes.

How these lands doe shew themselves at sea.



Thus sheweth the Bock when you are to the southwards of Scuytenes before the Liet.



Thus sheweth the Hill Sick when you are to the northwards of Scuytenes.

C H A P. III.

The coasts of Norway from Berghen to Stemmesnes.

Rom Ieltesioerd, or the Waghe of Berghen to Olde, the coast lies northnorthwest, and north & by west about 16 leag. that is al broken land with many rockes, where men may saile through within them. The Norway Barkes come off from Stade al alongft through that broken land and rockes, & within the Iland Harle unto Bergen.

About four leagues and a halfe to the southwards of Olde, lieth a great rowe of rockes lying three or four leagues without the other rockes, thwart off from the shoare to seawards called the Outweeres.

Betwixt them and Olde lieth a good haven called Southfoort, there lie two Ilands before it, where men run in betwixt them both alongft into the haven.

Olde is a high rock a good wayes from the land, & loofe from the other rockes by the land, but hath some small rockes lying about it, there lieth also a row of rocks a good waies off from it southwest into the sea.

About northwest and northwest and by north, from Olde lie two rowes of rockes, whereof some lie above, and some under water. When as you are either to the northwards or to the southwards of Old, it doth shew it selfe with a great faddle in two hommokes, and going downe round on both sides, but thwart off, or westwards from it, then it lieth in one round hill almost like Coll. You may (comming from the southwards) runne in about to the eastwards within Olde northeaft to Oldefound, and come out againe to the northwards of Old.

Four leagues to the northwards of Oldefound lieth Kyn also a great rock which men may saile round about, and sheweth it selfe with two sharpe hommokes almost like a Cowes clawe, or Bishops myter.

Betwixt Kyn and Olde goeth a great Sound into the land, upon which ly two Townes, Waldres and Esterdall. North-west from Kyn two or three leagues, and west and by south from Ornael ly three rocks, they are not great, and ly at three hommokes about a mans height above water & some suncken rocks under water: in the Yeere 1626 failed Dood of Hoorn with a laden ship upon it, and lost his ship. Southwest & by west about three leagues off from it, lie also some rockes above, and some under water.

Three or four leagues to the northwards of Kyn lieth Ornaell also a great rock which sheweth it selfe in one great high round hill. Three leagues, or three leagues and a halfe to the northwards of it lieth the south point of Stade. But Ornaell and Olde ly about north and south seven or eight leagues afunder.

Betwixt Ornael and the south point of Stade goeth in a great broad Sound, from whence men may saile through within the broken land to the southwards to Berghen. A little within the south point of Stade is a Bay where men may goe to ancker, thwart of a Sea-beakon, and lie sheltred for a west wind. The land of Stade lieth from the south point to the north point northnortheast & southsouthwest which is a whole main coast, but full close alongft by the shoare, with many small rockes, but none that men may saile about within them for to have any shelter for the sea. The Norway Barkes of all places to the northwards of it, yea and all those which come off from the North Cape, can saile all alongft the coast op Norway unto Berghen, through within the rocks, except thwart of this land of Stade, there they must run a sea-board through the sea.

Betweene these two fore said points are also two little havens, where men may ride, bur are little or nothing used.

To the northwards of Stade the land lieth with many Ilands northeaft to the Broadfound 8 leagues. About halfe wayes lieth a little Iland or rock called Swynoe (that is Hogges-Iland) a league from land without the other Ilands of Flowach. When you are close by the north point of Stade, and go on northeaft, you run through within that little

Iland Swinoe, but with a northeaft and by north course about a seaboard of it.

He that is bound to Roemfdaell, or into the Sounds of Sudmer, must runne into the Broad-found, which goeth in at the ends of the Ilands of Flowach east and east by south, the outermost of these Ilands is called Hesseu. On the north end of this Iland Hesseu ly divers rocks, some above, and some under water, streaching about a halfe league, from the point into sea, men may saile through betwixt them and the Iland, hard all along by the Iland, it is faire and cleane. When you come to the end of these foresaid Ilands, you shall see east from you about two leagues, a great high short Iland called Goedeu, or of some Godtsche-sand, a little to the southwards of it, somewhat further in a great blacke rocke of fashion like a hay-cock, or almost like a suger-loafe, it is called by the saylers the Cookes-broad: saile in right with it, but bring not that foresaid rock to or under that Iland, but keep it cleare off without it: for els you shold surely saile upon the foresaid suncken rockes, which lie under water at the north side of the Broad-found.

For to avoid them suncken rocks on the north side of the Broad-found this is also a good marck, when the north point of the towne comes to be hidden after the northermost Iland of the Ilands of Flowach, then men comes against the shallownes, but so long as you can set the foresaid point verie well without the Iland, you are fre of the rocks, but the point being hidden and out of sight you are on the rocks.

From the Iland Goedeu or Godtsche-sand runneth off also a little riffe, to the southwards, or towards the southeaft from it. When you come by that Iland, runne about by that little riffe, in betwixt it and the foresaid black rock, and ancker a little within that riffe, under Goedeu, runne not farre within it, for to avoid a suncken rock, which lieth somewhat further in, not farre from land, there stand two little warders upon the shoare, a little within the riffe for knowledge of the road.

Behind, or to the northwardes of Goedeu lieth the little Iland Geske: upon it standeth a little church on the south side, before it men may also ancker in eight or ten fathome cleane ground.

A little within Goedeu, on the east side of Geske lieth an other Iland, greater then Geske, called Walderoe, on both sides of the southeaft point of that Iland men may ancker in good cleane ground, and ly landlockt for all windes.

From thwart of Geske and Walderoe lieth a great multitude of Rockes northwest of farre into sea, that comming a seaboard alongft by Swynoe with a northeaft course, you shold fall farre within them.

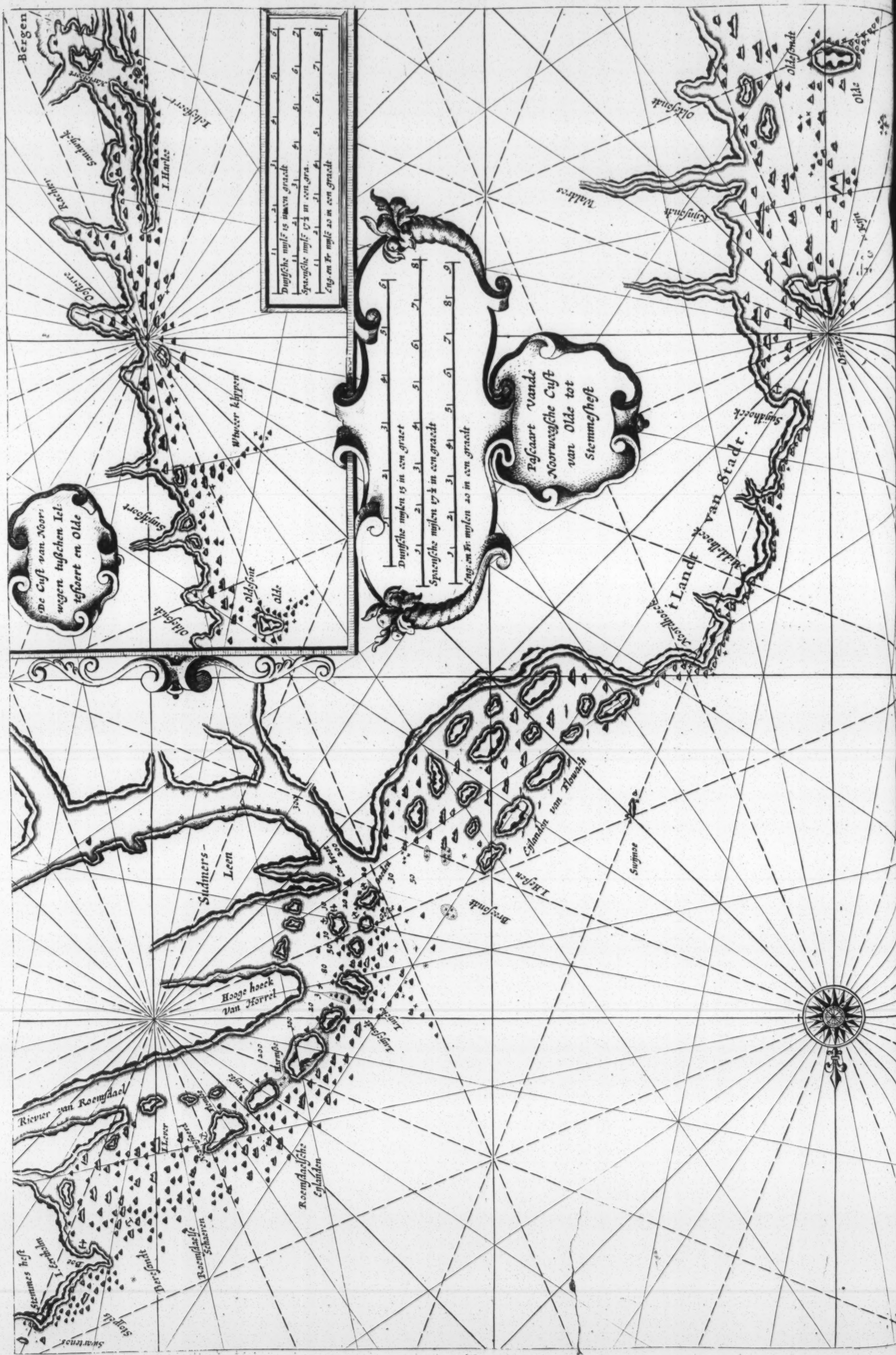
He that commeth from the northwards may saile by west along by these rockes to Goedeu, and leave the foresaid suncken rocks (lying on the north side of the Broad-found) on the starboard side of him, and runne in about by the point of Goedeu, as hath beene before said.

You may also run in to the northwardes of Goedeu, to wit, in betwixt Goedeu and Geske, & ancker within Geske, or under Walderoe, but it is not well to be done, but for them, which are there verie well acquainted.

There lie manie Rocks, some above, and some under water, whereof men must take heed. In at the Broad-found is the best and surest.

For to runne from Walderoe to Roemfdaell, goe on the northwardes, alongft by the great Iland Luycko, it is in that farewaie, 10, 20, 40, 60, and 80 fathome deepe, but even past Luycko runneth a stone riffe thwart over the farewaie, on against the point of the maine land, you must there abouts edge off from the Ilands on the larboard side, and run indifferent close alongft by that point of the maine land on the starboard side, and then you runne over the deepest of that stone riffe, to wit in three fathome or there abouts, as soone as you shall be over it, it is againe very deepe, of ten, twentie, and presentlie an hundred & two hundred fathom. Run on still by the land on the starboard side, & verie close alongft by it, and leave al the Ilands lie on the larboard side, and so you shall come into the River of Roemfdaell.

Towards



Towards the southeast from the aforefaid Iland, Goedeu or Gotsche-sand, goeth a great deepe river into the land, to Sickule, Honighdale, and other lading places more.

To the northwardes or northeastwardes from Geske lie (amongst a great manie other rockes and little Ilands) five great Ilands: the first called Luco, which is a high Iland, like as also the second, betwixt these two goeth in a channell, about southeast called Luyckfound.

Vpon the third called Harmfoe lieth also a high hill, but is at both endes somewhat lowe.

The fourth and smallest called Lemfoe or the lowe Iland, sheweth it selfe in two or three lowe hommocks.

The fifth called Flemseu, or the Roof Iland, is a great & lowe Iland, but seemeth little to see to at sea, because there lieth but one hommock upon it (not verie great) and of fashion as the rooffe or cabben of a Hoyer, at the west end highest. Within the east point of that Iland is a good road in a bight, where men lie landlockt for all winds.

To the northwardes or eastwardes of Flemseu or the Roofe Iland, goeth in a channell called Nogwe Fioerd, lying in east and by south, at which men may runne in to Roemfdale.

Without these foresaid Ilands off from Luco unto Boede lieth a great multitude of outrocks, great and small, called the Roemfdales Schares.

Eastwardes from the Roofe Iland or Flemseu lieth, amongst other rocks and little Ilands, the Iland Lever, which men may saile about on both sides, either whether they be bound outwards from Roemfdale to Beresound or Boe, or inwards from Boe or Beresound, and will runne through the foresaid Ilands.

Beresound is a haven within some rockes even to the southwards or westwards of the point Boe, there it is good lying, but not good to come into without a Pilot, or some one that is there well acquainted.

Boede is an out-point, with a neck or small point of land, fast to the maine land, alongst to the southwards of it men may runne in, and up to the southwards to Beresound, or els goe to ancker in a bay on the north side behind Boe, by some houses where they may lie sheltered for a west winde.

From Boe to Stemmeshest the coast lieth about northeast two leagues, betwixt them both about halfe waies lie manie small lowe black outrocks, as if they were sowne alongst the shoare, called the Stoppels, betwixt them and the maine land, you cannot saile through with great ships without great danger. The Norway Barckes runne alongst within them, and also ancker there within, under a Rock, which is somewhat greater then the rest, and lieth about the middest of the Stoppels (or somewhat nearer the maine land) called the Eartholme.

All the Ilands betwixt Broad-sound or Flowach and Boe, belong under Roemfdale.

Of the tydes, and course of the streames.

Betwixt Berghen and Stade the water riseth and falleth, but it keepeth no certaine tyde: a southsouthwest and northnortheast moone maketh there most full sea.

Betwixt Stade, Luyckfound and Boe a southsouthwest and northnortheast Moone maketh high water.

Courses and distances.

From Ieltesfiorde or the Wage of Bergen to the Rocks of Outweers northnorthwest, and north and by west about 11 or 12 leagues.

From the Outweers rocks to Old northnorthwest, & north and by west betwixt 4 and 5 leagues.

From Old to Kyne north and by east, and northnortheast 4 leagues.

From Olde to Ornael north, & north & by east 7 or 8 leag.

From Ornael to the south point of Stade northnortheast 3 leagues.

From the south point of Stade to the north point north-northeast 8 leagues.

From the north point of Stade to Swyno or Swynooft northeast, and northeast and by north 4 leagues.

From Swynoe to the outermost of Flowach, or the Broad-sound northeast and by east 4 leagues.

From the north point of Stade to the Iland Hessen, or the Broad-sound northeast 8 leagues.

From Hessen to Goedeu east, and east and by south 3 leag.

From Swynoe alongst without the Roemfdaels schares to Boede the course is northeast and by north

From Stade to the north end of Hitland westsouthwest 69 leagues.

From Stade to the east point of Iland westnorthwest 200 leagues.

From Stade to Greenland northwest about 330 leagues.

Heights of these lands.

The Outweers rocks lie in 61 degrees.

The Iland Kyne in on and fixtie degrees and thirtie minutes.

Stade in 62 degrees.

Broad-sound, or the Iland Goedeu in 62 degrees and 30 minutes.

Luyckfound in 62 degrees and 40 minutes.

The Stoppels and Boede in 63 degrees and 28 minutes.

How these lands doe shew themselves at sea.



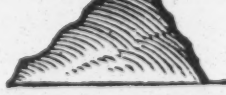
The land about Northfoert and Southfoert, when it lieth east and by south from you.

Olde.

Kyne.

Ornael.

South point of Stade.



Thus shew the Ilands Ornael, Kyne, and Olde to the southwards of Stade.



When the south point of Stade lieth northeast and by north from you then it sheweth with the land from thence southwards within Ornael, Kyne and Olde, like as it is portrayed in this and the figure following.

The land about Olde.



This followeth the former figure.



When the point of Stade lieth southsoutheast eight leagues from you, it sheweth thus.

When Stade is southsoutheast from you, and Goeden east four leagues, then the land betwixt Stade and the Broad-sound sheweth like as is portrayed in this, and the figure following, and then you are open before the Broad-sound.



This followeth the former figure unto Stade.



Thus sheweth the point of Stemneshest or Heynst.



The forme of the Iland Luyck when it is east and by north from you.



Thus sheweth the Iland Goeden being east from you.

Flemfen.
Roofe Iland.

Lemsou.
Low Iland.

Harmfoe.

Luyck



Thus sheweth the Ilands of Roemfdael, when the middlemost of the three highest and the westermost is southeast from you about three leagues.

Stemneshest.



The Ilands of Roemfdael.

Thus sheweth the land betwene Stemneshest and the Broad-sound, when as you saile a seaboard, alongst by the Roemfdaels Ilands and Schares.

C H A P. I V.

The Liet of Dronten.



From Stade to Stemneshest (or Stemmesnes) the course is alongst without the Ilands northeast and by north about 26 leagues, the land betwixt them both is called the Governement of Roemfdael.

Stemneshest.

Black Oxe.

Whiteholme

Sunken rock.

Smeerholme

Stemneshest is a high point good to be known, it sheweth it self (when as you get sight of it, coming from the southwards, or the westwards) in two hommocks, thwart of it goeth in the Liet, with divers entries. About a shot of a cast peece from the point lieth a black round rock, altogether alone, not verie great, called the black Oxe. Betwixt it and the point goeth in an entrie, (called after the foresaid rock, also the black Oxe) northeast and by east, it is not verie wide, and upon the showdest foure or five fathome deepe at lowe water, the nearer to the Oxe the deeper, and the nearer to the maine land the showlder water. A little within the rock, (the black Oxe) lieth an other great Rock or Iland, pale of colour, called Whiteholme, which you must leave (in sailing in) also on the larboard side, you cannot saile through betwixt it & the black Oxe, because from the one to the other it is all full of rocks, some above and some under water. A little within or to the end of Whiteholme lieth a suncken rock, which you must leave also on the larboard side.

In calme weather or smooth water you cannot well see it, but when it doth blowe any thing hard, you may well perceive it by the breacking of the sea upon it. On the starboard side within Whiteholme, lieth a great multitude of rockes, as if they were sowed alongst the shoare, amongst these rockes a little within or to the eastwards of the point of Stemneshest lieth Smeerholme, an Iland where men may ride under, and lie sheltred for all windes, except with east and northeast windes, which blow there in open, with those windes you cannot also come out there, neither with south-southeast, south, southsouthwest, and southwest windes, you cannot also come in there. You must saile in there from the northwards, behind the Iland. In the going in (which is not above a cables length broad, and eight or tenne fathome deepe) lieth a little round rock, at high water, about a fa-

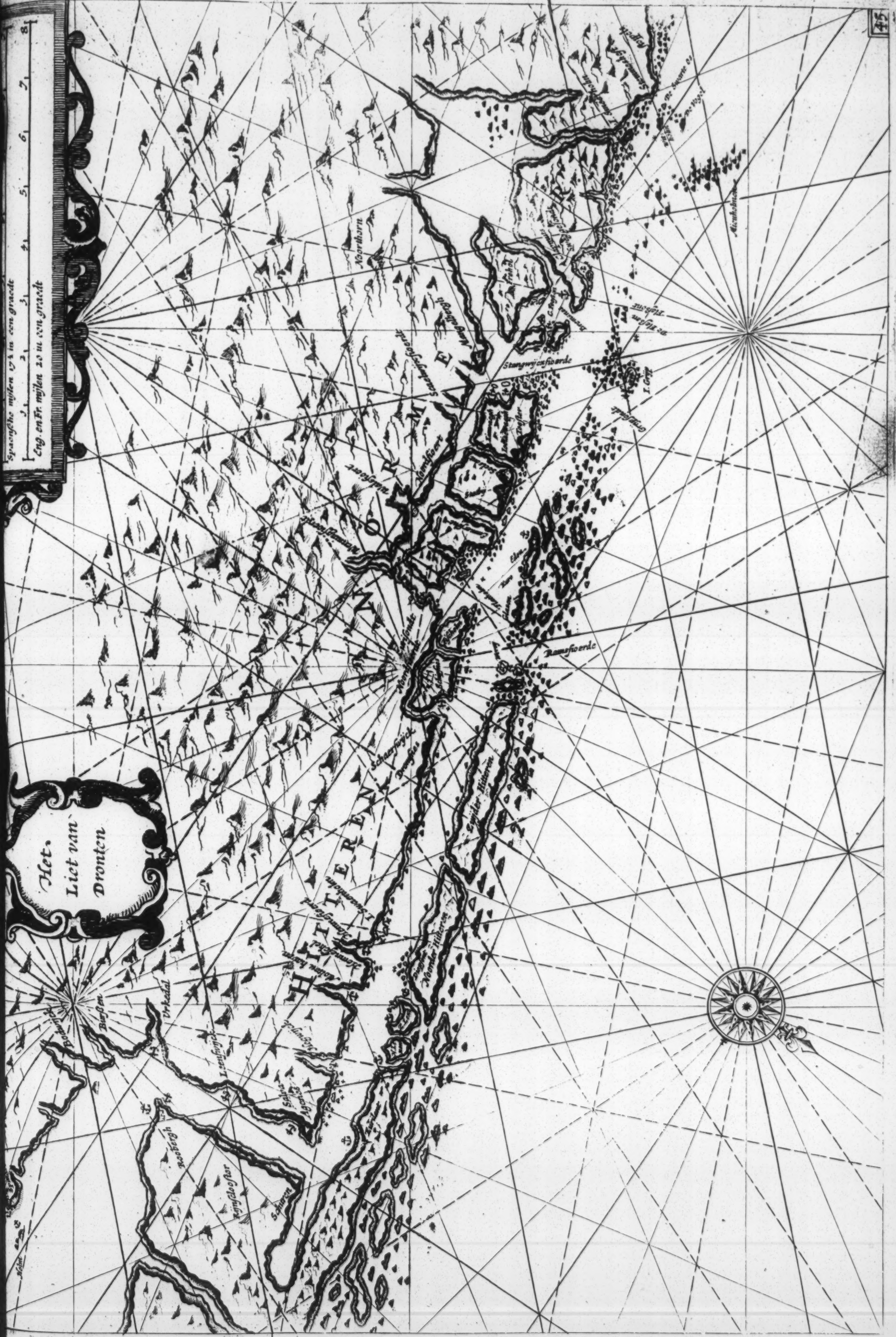
thom above water, by which you may runne about on both sides.

Northnorthwest about a halfe league from the black Oxe lieth also a greater and broader, but a lower rock, called the Voghell, which at high water lieth a little above water, but with a spring the sea runneth alongst over it. Betwixt it and the black Oxe there seemeth to lie in a broad and wide channell, but betwixt them it is full of suncken rocks and fowle grounds under water: when it is smooth water, it is no wise good to runne in there, but in fowle weather and with a growne sea, and that you cannot doe otherwise, you might runne in thereby the breaking of the sea.

A great halfe league northnorthwest from the Voghell ly yet some rockes lying to the eastwards, called the Mewholmes, betwixt them & the foresaid Rock the Voghell goeth in a broad and large channel, verie cleane without any dangers, which (after the Rock) is also called the Voghell, there men may see all that can doe hurt. The marks for to finde this channell, coming out of the sea, are two hills, verie good to be knowne, which lie from thence east and east & by north within the land. The westermolt is a hill somewhat lowe, and round of fashion, almost like a flat hat, called the Clapmuts. The eastermost is a high steepe sharp hill, above on the one side with a cutte, like as a steppe, called the Manghelbergh. When these are one in the other, then they are about east, and east and by north from you, and then you are also right open before this channell.

For to sail in there keepe these two foresaid hills one in the other, and sail in right with them east, and east and by north, or (when as you come within the Voghell) somewhat more easterly, so that you have the foresaid hills out a head, a little on the larboard side, untill that you come by the maine land, and then eastnortheast alongst by the shoare, (if you be bound to Dronten) unto the Iland Edou or Edoe.

About a league within the Voghell lie two rockes, the westermost is high and somewhat round, the other is lowe and also round, and lieth to the eastwards from the first, towards the land, you shall runne with the a foresaid course of east, and east and by north off from the Voghell, about a shot of a cast peece alongst to the southwards of the two rockes. About halfe waies betwixt them and the Voghell; (but nearest the two rockes) lie two suncken rockes, these you leave with the same course also on the larboard side, you may see the



Spaansche mijlen 17 1/2 in een graadt
Eng. en Fr. mijlen 20 in een graadt

Het.
Liet van
Dronen

the sea alwaies breake upon them, except in verie smooth water.

You may also saile through betwixt these two foresaid Rocks and the Mewholmes, to wit alongst to the northwards of the rockes, untill you come into the Liet, leaving these two rockes on the larboard side, and the Mewholmes on the starboard side.

For to come into the Liet alongst to the northwards of the Mewholms. Alongst to the northwardes of the Mewholmes and those two foresaid rockes is also a channell where men may saile through into the Liet, then you must leave those two Rockes to the southwards on the starboard side, and some other rockes to the northwardes of them on the larboard side of you, and so come also into the Liet.

About three quarters of a league within those two foresaid rockes, lieth a great suncken rock right in the midst of the farewaie, which breaketh alwaies, and at low water is uncovered, about which you may saile on both sides. From this suncken rock to Sweggesound, the course is east, and east and by north a league, but the Voghell or the Black Oxe and Sweggesound are distant about three leagues.

Swegghesound. Sweggesound is a little haven behind three great Rockes, with a little Iland of an English mile long on the east side of it, when you saile alongst by it being but a little off from the shoare, you cannot discern this Iland from the maine land, but it seemeth to be all whole land, he that is not there verie wel acquainted cannot perceive that to be an Iland, before that he come close to it, for to runne in behind it.

You may saile into Swegghesound either to the eastwardes of that Iland, or to the westwards of it, according as the wind will serve. To the westwards of Swegghesound or the three foresaid rocks, at the west end of the foresaid Iland ly a great multitude of rocks and foul ground.

For to saile into the wester channel, you must leave them all on the starboard side, and runne in betwixt them and the three foresaid rocks: when you come to the end of those three rockes, you must loofe up to the southwards about by them towards the northeast or north, and ancker there in seven or eight fathome, there you shall lie landlockt for all winds, but with a storme out of the west, the growne sea can come in rowling there through. You may also saile in further behind the rockes, untill you come in behind the foresaid Iland in a little narrow bay, there men doe ly in two fathome, and a halfe, or three fathome, & also sheltred for all windes. In this haven of Sweggesound the ships commonly doe ly there to tarrie for the wind. He that is bound to the westwardes, may runne out to the southwards of the three foresaid rockes, and he that is bound to the eastwardes, may saile out to the northwardes, through betwixt the land and the Iland, but that channell is verie narrow, and not above two fathome deepe.

Bremfnes. A halfe league to the eastwards of Swegghesound lieth the haven of Bremfnes, a little quarter of a league within it, on the starboard side, standeth a little church, with some houses, which you shall espie behind a point, when as you are come somewhat within, there dwelleth the Governour of Normer Leen. Men where wont to come to ancker there to paye custome, but now the Kings Customer dwelleth over against it in little Fooffen, so that now at this present, men may either goe there, or to little Fooffen for to paye there custome, according as occasion doth serve.

For to ancker before Bremfnes, you must looke out for two beacons, which stand by the church upon the water side: thwart of the innermost is the best road, and also the best ground, let your ancker fall there, in twentie, fiftene, eight or tenne fathome, that is neare by the shoare, for there it is verie steepe rising ground, and make you fast with a hawser to the beacons, there you shall ly landlockt for all winds, you may not also ancker no where thereabouts, then in the foresaid place, by reason of the great depth, and very steepe grounds.

Little Fooffound. Little Fooffen or Fooffound is a narrowe haven, lying to the northwards, over against Bremfnes, betwixt two lands. In these two places ly the shippes commonly to tarrie for the winde, they that are bound to the eastwards before

Bremfnes, and they that are bound to the westwards in little Fooffen. Men may also saile from Fooffen to the eastwards, through betwixt the foresaid lands, and come into Stangwixfiord againe in roome into the Liet of Dronten, but it is a verie narrow channell, and not wel to be done for them which are not there very wel acquainted.

Westnorthwest from the haven of Bremfnes, goeth a Fleff channell through the rocks called Fleffound, after three round Rockes called the Fleffes, which ly in a rowe without the east side of this channell, and thereby is very good to be knowne. A little within the three Fleffes, lieth a great black flat rock, when you are by or in the havens mouth of Bremfnes it lieth westnorthwest, or somewhat more northerly from you. For to run out from thence at that channell, saile right with the foresaid black flat rock, and runne to the southwards of it close alongst by it, leaving it and the Fleffes on the starboard side, (to the northwardes of this flatte rock and the Fleffes it is all full of rocks, some above, and some under water) you shall then leave on the larboard side of you two other round rocks, which you shall see lie about a shot of a cast peece eastnortheast, or northeast and by east one from the other. When you are come without the Fleffes, you shall be without all the rocks, but somewhat to the westward of them lieth a great row of rockes, lying westnorthwest a good waies into sea, you may runne westnorthwest alongst by them unto the end: or when you are come without the Fleffes, you may set your cours somewhat more northerly, for to get sea roome betimes. In this foresaid channell there is no danger, that can hurt you, but you may see it. In the offing you may knowe this foresaid channell, by the foresaid three Fleffes.

The marks for to finde Fleffound comming in out of the sea, are two high hills, the one called Frekoll, lying upon an Iland towards the southeast not farre from Bremfnes, the other called Northorne, lying farre within the land. Frekoll is a hill with two hommocks, whereof the southermost is the smallest and lowest. Northorne is a hill much higher, with a sharp toppe, and lieth alwaies white, covered with snowe. When this hill and the foresaid southermost hommock of Frekoll stand one in the other, (then they are southeast and by south from you) and that you saile in right with them, you shall without faile fall right open before Fleffound. It is a channell of a short in let, and very commodious, as also Grypsound, for them which comming from Dronten, Edou, or any other place in the Liet, and before night cannot saile to the channells of the black Oxe or Voghell, for to runne through them into sea.

About a quarter of a league to the eastwardes of Bremfnes lieth Stangwycxfoerd, a large broad sound, at the east point lieth a great manie rockes, within it lieth a haven called Hamersound, you may not come in there but with a Pilot, except you be there extraordinarie well acquainted.

A quarter of a league within that foresaid point, on the north side of Stangwycxfoerd ly two ladeplaces, Iorianwagh and Lynwagh, men runne in there to the northwards, behind some rocks, but it is also Pilots water.

Towards the southeast from Iorianwagh men may saile farre within the land, into many divers Sounds, as Stangwixfiord, Schaewicxfiord, Northfiord, Walsfiord, Wenningfiord and other more. Vpon the land of Iorianwagh lieth the high mountaine of Toester, in two hills, to the eastwards of it upon the next land lieth the mountaine of Stadebuye, also in two hilles, as Toester. These hills of Toester and Stadebuye, when you come from the westwards alongst the Liet, ly right behind one the other, and seeme then to be no more then one hill, but being thwart of them in the Liet, or at sea, each sheweth in two, which is together four very high hills, and are commonly called together without difference Toester Poester.

Betwixt Toester & Stadebuye runneth through a narrow Sound, into the Northfiord, called Soolfound. To the eastwards of Stadebuye runneth also another found through into the Northfiord, called Emmerfound, within which on the north side, close by the Northfiord is a ladeplace, where men doe lade good deales.

A quarter

A quarter of a league in the Liet, to the eastwards of Emmerfound, runneth in another Sound, at the entrie broad and wide, within it divideth it selfe into two parts. Sailing in there you must leave Fisholme and the Yellowe Iland on the larboard side, and a rocky Iland, called the flat Iland, with many rockes on the starboard side. The Yellow Iland is not well to be discerned from the maine land, for those which are not there well acquainted, the end of the Northfiord runneth there about behind it, & maketh it an Iland. The Norway barkes runne much there about behind it. To the southwards of the flatte Iland lieth a rock or little Iland, called Flatholme, betwixt them both is good anckering in tenne or twelve fathome, and landlockt for all winds.

Through this Sound men doe runne into Eurfound, a ladeplace lying in the Northfiord, there standeth a little church on the west side of the flatte Iland. Betwixt the little Iland is also a good haven, where men may ly in three, foure, or five fathome, it is not broad but cleane. To the eastwards of this Yellow Iland lieth the high land of Dromfnes. From thence eastwards, further up into the Liet, towards Dronten or Agenes it is most all whole land, and not so broken, as to the westwards of it.

Thwart of the rockes of Hammerfound (lying on the east side of Stangwycxfiord) lieth a faire channell called Grypesound, one of the best channells for to come in out of the sea into the Liet, it is about a quarter of a league broad, and goeth in close to the eastwards of the Iland Grype.

Grype is a little round Iland lying from the Vogell north-east and by east distant about seven leagues, upon it dwell manie Fishermen, which goe from thence to sea, to fish upon divers bancks, of fortie, fiftie, seventie, eightie, and hundred fathome, foure, five, sixe, seven, eight, and some tenne leagues without the land, which they knowe to finde by markes on the shoare. On the north side of Grype there ly but two or three rocks close to the shoare, some say that thereabouts is ancker ground in twelve fathome. On the south or west side it is full of Rocks, but they ly most above water. About halfe waies betwixt Grype & the three Flesfes, somewhat without all the other Rockes, lieth a suncken rock a little under water, he that runneth alongst without those rocks, must be mindfull thereof.

For to goe into Grypesound comming in out of the Sea, you must bring the high Mountaine of Toester Poester east-southeast from you, and saile in right with it, & so you shall not faile to runne in sight of the Iland Gryp, which is good to knowe from the other rockes, by the great many Fishermens houses, which stand upon it, and upon no other Ilands nor Rockes thereabouts, leave that Iland on the starboard side, and goe in first eastsoutheast right with Toester, being past the Iland Gryp, bring Toester two points on your larboard bowe, and goe so in southeast, and you shall come into the Liet betwixt Hammerfound and Toester. From thence to the little Iland Edou are about foure leagues. About three leagues to the westwardes of it, or a league to the eastwardes of Grypsound in the Liet, lieth also a suncken rock, almost even with the water, and almost amidst the fairewaie, nearest the north side, you may alwaies see the sea breake upon it, leave it on the larboard side, and runne about to the southwards of it, there it is broadest, you may for need runne also to the northwards of it, through betwixt it and the other rocks, but it is there narrow.

Edou or Edoe is a somewhat low plaine Iland, a league long, & verie narrow, which is the first land on the larboard side, upon the Liet, that men have shelter of from the sea, to the westwardes of it, there is nothing but broken land, Rockes and little Ilands, where the growne sea commeth rouling in through. Not farre from the west end, upon the south side of Edou, standeth a little white church, thwart of it, or a little to the eastwards of it, men may ancker in eight, nine, or tenne fathome. The shoare is steepe ryfing ground: If men doe come neare it in foure fathome, they shall be presently fast, but the ground is soft. When as men come from the westwardes, and wil ancker there, they must (comming neare the west end of the Iland) continually feeble with the lead for the ancker ground, and so soone as they feeble

it, let fall their ancker, thwart of the aforesaid little white church, or a little to the eastwardes of it; so that the little church come to stand over the houses. When as men let fall their ancker in tenne fathome, and wending up towards the land, viere out the cable, then the shippe shall come to ly there in six fathome. The Liet is thereabouts about a halfe league broad.

Vpon the east end of Edou is also a little haven called Kurou, and it is so little that there can ly no more then two or three shippes. There lieth a little black rock not farre from the shoare, men doe runne in betwixt that little rock and the Iland, and ancker betwixt them both, there men ly landlockt for all winds, but the ground there is not cleane.

At the east end of Edou lieth another Iland somewhat long, called Glaseu. To the eastwardes of it runneth a great broad Sound into sea, called Ramsfiord, but it is knowne of few. With northerly winds there commeth through a great growne sea into the Liet.

To the eastwardes from Ramsfiord lieth the land of Hitteren, two great long Ilands, Norther Hitteren, & Souther Hitteren, together about seven leagues long, so that he that faileth up the Liet thwart of them, can not perceive other wise, but that he faileth in betwixt two maine lands. At the south end or west end of Hitteren, which is on the east side of Ramsfiord ly two little Ilands, called Weroÿ, there you may saile in betwixt them, and ancker in good white sand ground, you may also saile through betwixt the little Ilands, alongst into the Liet, and then you leave a suncken rock lying on the starboard side, by the southermost little Iland.

From the Iland Edou to the Highland, or the point of Dromfnes it is northeast and by east and eastnortheast distant about three leagues. To the westwardes of that point, to wit, betwixt that point and the land to the westwardes of it called Schipnes, lieth a haven called Schaerfswyke. In the mouth of this haven, about the middest of the channell, but somewhat nearer Schipnes then Dromfnes, lieth a suncken rock, which falleth drie at low water, you may runne in about it on both sides. A little within the point, on the south side, standeth a Countriemans house, before which you may ancker in five, sixe, or seven fathome, cleane rising ground, which you may come neare by your lead. This haven lieth about a league more to the eastwardes, then Ramsfiord, on the south side of the Liet, fit for to come to ancker in, for those which can saile no further by day.

To the westwardes of this foresaid haven Schaerfswyke alongst the land of Schipnes, lie manie Rockes by the shoar, some above & some under water, therefore you must somewhat shunne the south shoare thereabouts, but the north shoare alongst by Hitteren is verie cleane. The Liet is thereabouts a great halfe league broad.

About five leagues to the eastwardes of Schaerfswyke, on the north side of the Liet, lie the two Ilands of Lexen, to wit, Norther and Souther Lexen, which are together about a halfe league long. There the Liet lieth betwixt both east-northeast, and northeast and by east.

In souther Lexen is a bay, before which lieth a round rock, making it there within a faire haven, called the haven of Lexem, the best haven of al the Liet. Iohn Geurtson Boogart of Amsterdam, hath (at his owne charges, for the commoditie of ships that come there) caused to be made a great Iron ring: men doe ancker either to the eastwardes or to the westwardes of the foresaid rock, where they will in sixe, seven or eight fathome, and bring a hawser on the foresaid Ring, the further men doe runne into the bight, betwixt the Rocke and the land, the showlder it is, but all cleane and cleare ground.

At the norther end of Norther Lexen is also a place, where is good ancker ground fit for to make road in.

Over against the haven of Lexen lieth an other haven called Moltow, where the shippes doe oftentimes ancker in the Haruest or beginning of the winter, for to set saile with an east wind, because they can hardly get to saile from Lexen with easterly winds.

A league to the southwards or to the westwardes of these havens of Lexen and Moltow, on the south shoare, lieth a little

Swanholm. little Iland, whereupon standeth a Warder, called Swanholm, which men may saile round about; under that little Iland it is good anckering) as wel for them which are bound to the eastwardes as to the westwards) in four or five fathome good cleane sand ground.

The Terlingen.
Hemneschel.
The south side of the Liet off from Schaerswyke alongst to Hegwyke, (which is a league and a halfe, and two leagues by west the point of Agenes) is most cleane, with little fowle grounds: but from Hegwyke alongst to Agenes the coast is fowle and rocky. The north side alongst by Hitteren, is also indifferent cleane, except at the north end ly some rockes called the Terlingen, which lie somewhat off to the southwardes from the shoare into the Liet. A little to the eastwards of Hemnesioerd, over against Hemneschell (an Orchard upon a high land) there the Liet is at the narrowest, and no more then a halfe quarter of a league broad.

Hemnesioerd. Hemnesioerd lieth over against the north end of Hitteren, it is a bay where many Sawes doe stand, and abundance of good Deales are cut and laden.

Deepe-sound. To the northwardes or eastwardes of the Terlingen, at the north end of Hitteren, in betwixt Hitteren and Lexen, lieth a haven called Deepe-sound, the Norway Barks (coming from the southwardes) runne in there along behind Lexen to the northwardes.

Agenes. From Lexen to the point of Agenes on the south side, or to Euriland on the north side, the Liet lieth alongst east-northeast and northeast and by east, three leagues. Agenes is the northermost point of the Liet, you must go about by it when you are bound to Dronten.

Fossen-Garten. Betwixt Norther Lexen and Euriland lie two Ilands, the southermost is called Fossen, the northermost Garten, to the southward of Fossen you may sail through alongst into the sea, but not without a Pilot.

For to saile from Lexen to Agenes, runne alongst by the north shoare, which is the cleaneft, the south shoare is fowl. A cables length or a cables length and a halfe to the westwards of the point Agenes, lieth a funcken rock not farre from the shoare. For to avoid it and more other dangers, keepe alongst by the north shoare (but take heed that you runne not into no bights or bayes) so long untill that you can see the houses upon Agenes, then saile towards it, and then you shall not saile within any dangers on the south shoare. On the point of Agenes is also a great Iron Ring for to moare the shippes to, there by it is deepe and steepe off-going fowle ground. For to ancker there, you must bee verie close by the shoare before you shall finde ground, and then you must make a cable fast on the foresaid Ring, close to the shoare it is about five or sixe fathome deepe fowle ground.

Euriland. On the north side of the Liet over against the point of Agenes, lieth Euriland, a flat faire green land, upon it standeth a little white Church about an English mile off from the shoare within the land, almost like the little Church of Edou, thwart of it is a good road cleane flat rising sand, and clay ground, men doe commonly ancker there thwart of the first beakon in seven, eight or nine fathome good clay ground, in sixteene, seventeene or eighteene fathome men ly farre from the shoare.

With contrary windes, or that men cannot come about Agenes, or taken with the night, they doe ancker most commonly there.

By Agenes there runneth out alwaies a great strong current to the westwardes, and by reason the lands from thence to the southwardes on both sides are verie high, and the wind (being southerly) falleth there betwixt them both, alwaies strong to the northwards men cannot (in sailing up) get any thing there with turning to windwards, but in sailing off they may get much by the current with turning to windwardes.

Salva. A little about the point of Agenes on the starboard side, is a great Bay called Salva, wherein is good ancker ground, and good lying, but with northerly windes it is verie hard to come out there for those that are bound out, or to the westwards.

From Agenes to the point of Roobergh, the Liet lieth southsoutheast about three leagues. About halfe waies or somewhat more, on the westside lies another bay called Lenswyke, where men may have road.

Roobergh is a somewhat flat point, to the eastwards or to the northwards about this point is good road in 6 or 7 fathome. A good waies from the shoare to the westwards of the point, the Norway Barks doe oftentimes ancker, but the ground there is not cleane, and therefore it is no good road for great shippes.

Over against Roobergh lie divers Bayes and havens, as Vrkedal, Bursen, Bodwyke and other more, where many Deales are cut and laden.

From Roobergh to the little Iland or Holm of Dronten, the course is east three leagues, when you are a little past Roobergh, you shall soone espy it against the high land to the eastwards of Dronten, betwixt them both it is wide and broad. From the point of Roobergh the land lieth up to the northwards so farre that at some places men can hardly see over the water. When you come by the Holm, you may saile about within it on both sides, you must bring the Holm to the northwards of you, and ancker to the southwards of it in fixe, seven or eight fathome, according as you lie close to it or farre from it, there is cleane clay ground. The Holm and the Elf, or river of Dronten, ly north and south about a shot of a cast peece afunder, betwixt them both it is everie where good ancker-ground, and depth of 20 and 21 fathome.

About a bow-shot northeast from the Holm ly two funcken rockes, which at low water are uncovered. When as they are even covered with the flood, then you may saile in over the showldest of the Barre into the Elf with a ship that draweth 11 foot.

To saile into the Elf of Dronten, it is Pilots water, there stand commonly two or three malts for beakons, but there is no certainty of them that men may trust unto, for they are oftentimes shifted: sometimes on the west side, and also sometimes on both sides. When you come a ships length or two within the beakons you shall come to a chindely point on the starboard side, by which you must luff up to the Kay: upon the Barre it falleth with a spring tyde almost dry, but within it is deeper.

Of the tides and course of the streames.

From Stade to Dronten a south and by east and north and by west moon maketh high water, with a Spring it falleth a fathome and a halfe up and downe, with an ordinary tyde scarce a fathome.

The tydes runne not there alongst the land, but the flood falleth thwart on against the land, and the ebbe to the contrarie thwart from the shoare to seawards.

Courses and distances.

From Stemneshest to Gryp northeast and by east 7 leagues.

From Gryp to the Ilands of Momendall northeast 18 leagues.

From Gryp to Holy land northeast and by east 27 leagues.

From Gryp to Rust north and north and by east 64 leagues.

From Gryp to the north end of Hitland southwest and by west 125 leagues.

From Gryp to the south end of Fero westsouthwest 167 leagues.

From Gryp to the east point of Island west, and west and by north 233 leagues.

Of the heights of these lands.

The Ilands Whitholme and Smeerholme lie in 63 degrees 44 minutes.

The Iland Gryp in 64 degrees.

The towne Dronten in 64 degrees 34 minutes.

How these lands doe shew themselves at sea.

These two figures belong at the crosses one to the other.

The land from Gryp westwards or southwards towards Stemmeshest sheweth like these two figures here about, when as you saile alongst by it seven leagues without the land.

C H A P. V.

The Coast of Norway from Dronten to Tromsund.

Betwixt the Ilands Westerholl, Sanien and Tromsund, ^{Sanien} you may also runne in at divers places, and make road. ^{From} Thwart of these Ilands lie here and there in some places ^{Sanien} funcken rockes and fowle grounds, a great league and more without the land. He that saileth alongst this coast, may be mindfull thereof.

Of the tydes and course of the streames.

ON these coasts a southsouthwest and northnortheast Moone maketh full sea. The flood commeth there out of the northwest, and westnorthwest, and falleth alongst Finmark towards the North Cape.

Courses and Distances.

From Rust to Loffoert northnortheast	33 leagues.
From Loffoert to Sanien northeast	37 leagues.
From Sanien to Suroy northeast and by east	43 leagues.

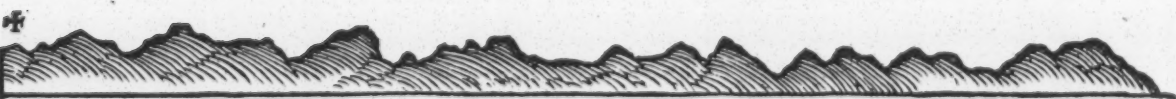
Heights.

The Maelstream lieth in about	68 degrees.
The Iland Sanien in	70 degrees.

From the Iland Gryp to the Nomendals Ilands, the course is northeast eightene leagues, but from Gryp to the Iland Rust, north and north and by east sixtie four leagues. Betwixt them lie (besides the Nomendals Ilands) also the Ilands Holyland, and Traenoch. Which are almost fast together, with divers faile waters betwixt them and streaching unto land all full of rocks and Ilands nevertheles there goeth a liet alongst through them, the which the northern Barbyro saile through. But it is not for great ships to befaile. Traenoch and Rust ly thirteen leagues asunder. From Rust to Wero the course is northeast and by north nine leagues, but to Loffoert northnortheast three and thirtie leagues. Betwixt Wero and Loffoert lieth the Maelstreame, where you may not saile through but at a still water. By the west point of Loffoert you may runne in and make road under it. And also you may runne through from thence within betwixt the Ilands and the maine land, all alongst unto the North Cape.

How these lands doe shew themselves at sea.

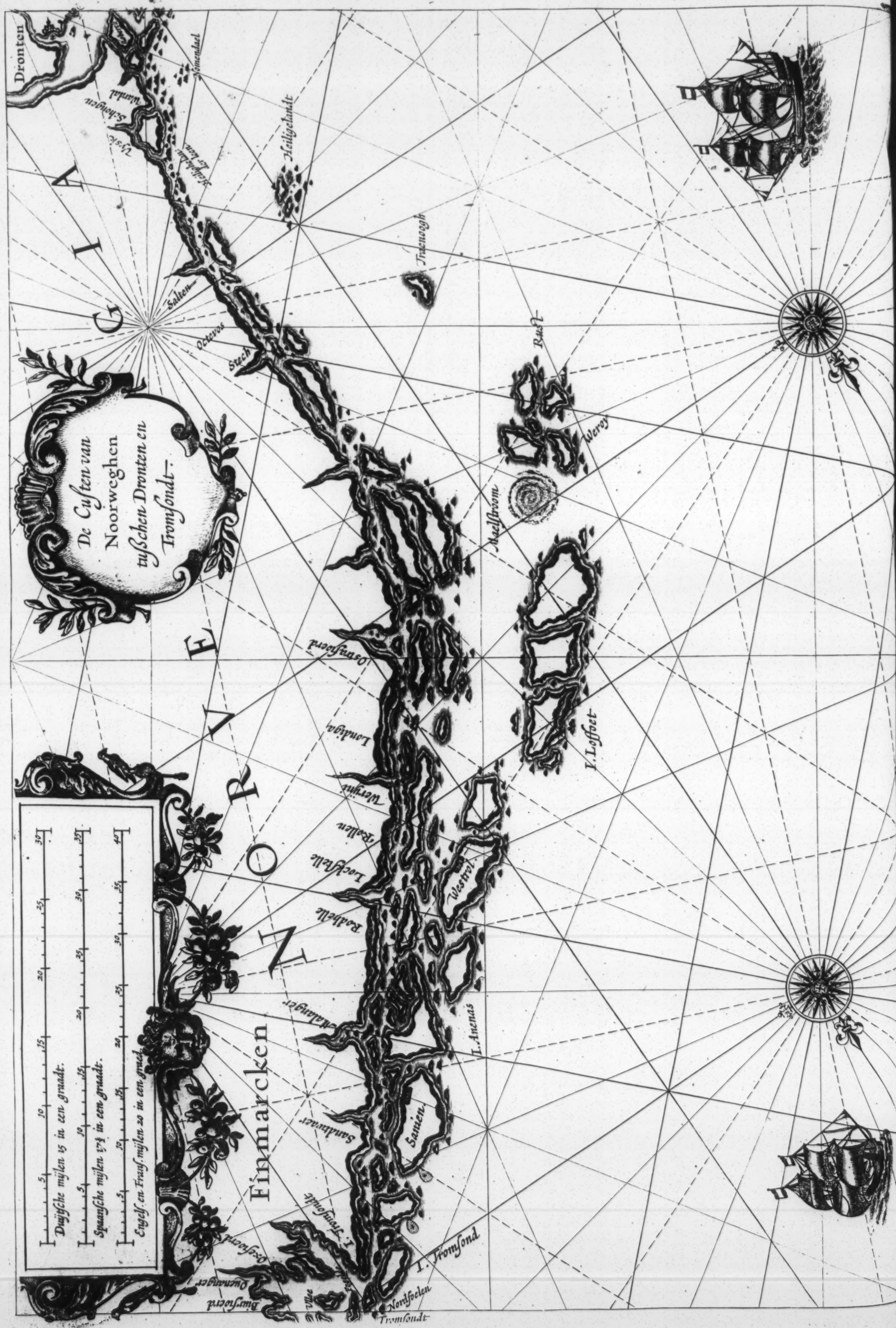
These two figures belong at the crosses one to the other.



Thus sheweth the Iland of Sanien, when the two high hills upon the east end are southeast and by south, and the point with the clift south and by west from you four leagues. When as the two foresaid high hills upon the east end are south from you, then they are right one in the other.



The east end of Westerholl sheweth thus when as you saile alongst by it, about seven leagues off from it.



C H A P. V I.

The Coast of Norway from Tromsund to the North Cape.

IT is from the Iland Tromsund to Suroy eastnortheast fifteene or sixteen leagues. To the eastwards of the Iland Tromsund, goeth in the Tromsund betwixt the Iland Fogelden and Skyrfeu, as you saile in there, you leave the Iland Lopen, and Lopenkalf lying on the larboard side without the other Ilands, within it are divers Ilands, bayes and sounds, where you may saile in, and seeke road, as Oxfoert, Biurfioert, and other more.

Betwixt Lopen & Suroy men doe saile through Suysound and Stiernerfound into the river of Altenbotten, and then betwixt them, they leave on the starboard side Niusfoerd, Axefoerd, and Longefoerd. On the larboard side about by the west point of Suroy, on the land of Suroy, lieth a haven, whereby is also a Fisher village, both called Haefwyke, Suroy is about ten leagues long, and lieth on the offside, eastnortheast.

Nine or ten leagues to the eastwards of the Iland Tromsund, about three leagues without the land, lieth a showld of rockes a little under water. Iohn Huyghen of Linschoten in his second voyage to Nova Zembla, in the year 1595, sailed with his shippe upon it in faire weather and smooth water, that the sheathing of his Stemme was beaten off to chifs; but after some beating the shippe turned off with the strong current. It is to bee thought that there ly more then men can see, or as yet are discovered.

About five leagues east and by north from the east end of Suroy, lieth the Iland Inghen, betwixt them both ly also Reefsholme and Shipholme little Ilands, which you may saile about on both sides, untill under Inghen or Suroy.

When as you come in betwixt Suroy and Inghen, there lieth thwart off from Suroy toward the other land, a good haven called Hamerfeest. A little further in, lie two high little Ilands, and over against them a road called Slechtenes. Betweene Hamerfeest and Slechtenes, before that you get Slechtenes, lieth a bay on the land of Suroy, where is good road in 25 or 30 fathom close by the shoare. A little past these little Ilands on the land of Suroy, over against the river of Alten, is a good road called Goeshop a fair sand-bay.

Between Inghen and the north Cape, or the Iland Maggereu lieth Helms Huy, an Iland which you may saile round

about, having on the northwest side, a bay called Ackefioerd, where men may make road for southerly & easterly winds, on the southeast side is a bay called Knaarwyke, where men may make road, and ly sheltered for westerly & northerly winds.

The North Cape is the northermost point of the Iland Maggereu, a little to the westward of it ly the little Ilands of Stappen.

On the south side of Maggereu even about the east point, lieth Keelwyke a good haven. On the same southeast side, by the southermost point of Maggereu, lieth a little Iland called Altenfouleu, the Sound betwixt that little Iland, and the land of Maggereu is called Maggereu-sound, there is good road, and shelter for almost all windes. Men may run in through Suysound to the westwards of Suroy, within Suroy, Inghen, Hemls Huy, and other more Ilands to the southwards of them, along through divers channells to the southwards of Maggereu, and come out againe into sea betwixt the North Cape and Northkyn.

From the North Cape westwards the coast lieth alongst the Ilands west and by south about 37 leagues, and then from thence westwards it falleth away more southerly.

Of the tides and course of the streames.

Betweene Suroy and the river of Altena southwest and by west, and northeast and by east Moon maketh high water.

At the North Cape a southsouthwest and northnortheast Moon.

To the westwards of the North Cape the streames come out of the northwest and westnorthwest, and fall alongst Finmark towards the North Cape.

Courses and distances.

From the Iland Tromsund to the west end of Suroy eastnortheast 13 or 14 leagues.

From the east end of Suroy to Inghen, east and by north 7 leagues.

From Helms Huy to the North Cape east and by north.

From the North Cape to Northkyn east and by south 12 or 13 leagues.

Heights.

The North Cape lieth in the height of 71 degrees 30 minutes.

How these lands doe shew themselves at sea.



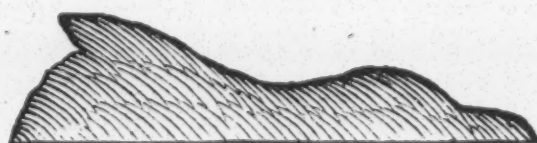
Thus sheweth the Iland Inghen when it is eastsoutheast four leagues from you.

Shipholm.

Iland without Suroy.



When as Shipholm is southeast and the Iland without Suroy is south about four leagues from you, then they shew themselves thus.

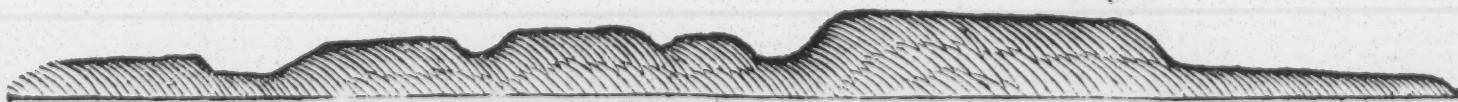


This hill lying upon the Iland Lappen, you may see over Suroy as you saile alongst by Suroy from the north end of the south end.



Thus sheweth Suroy as you saile alongst by it five leagues.

Long hill.



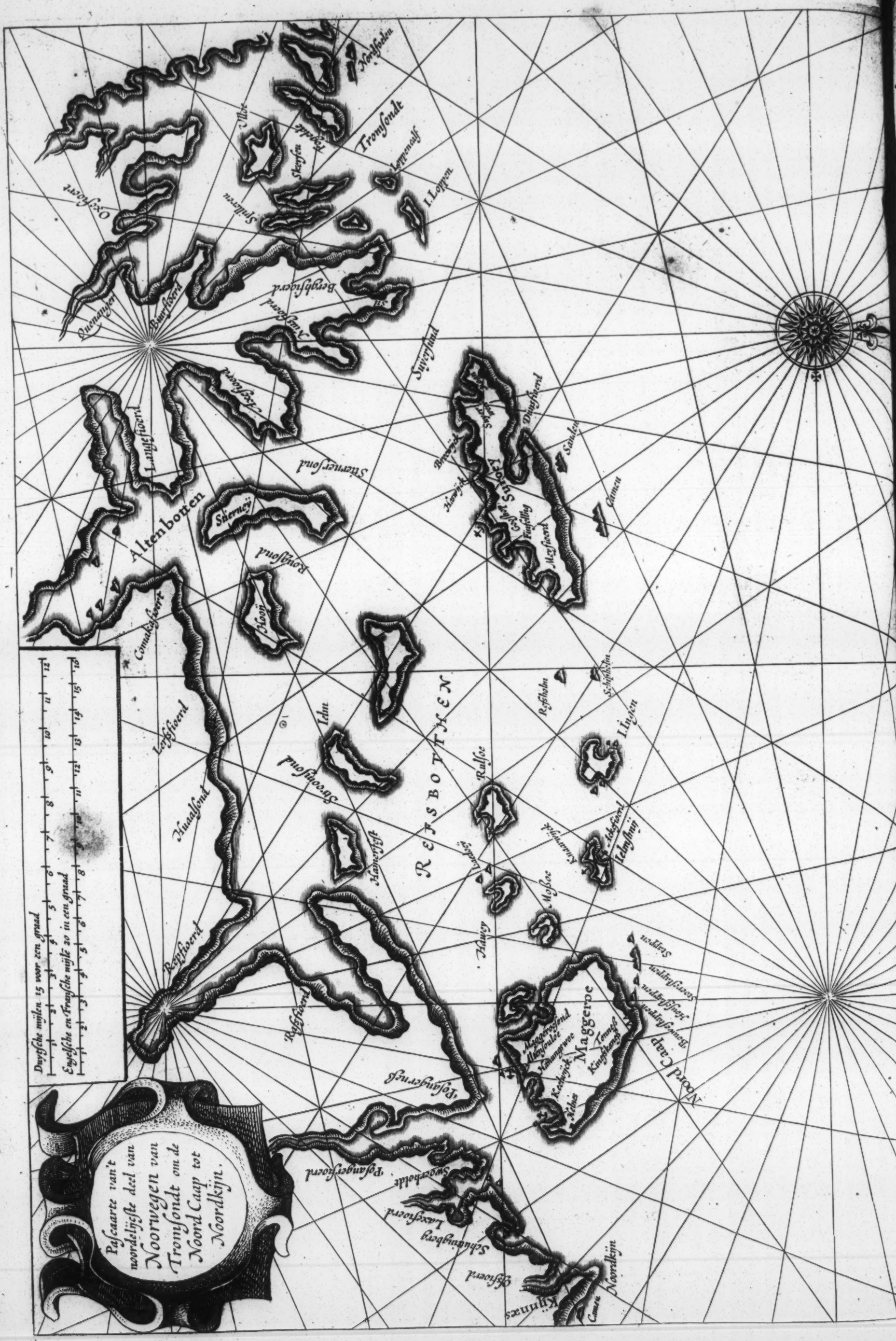
Thus sheweth Inghen when this Long hill is southwest and by west from you.

S

When

Pascaarte van't
 noordelijste deel van
 Noorwegen van
 Tromsøndt om de
 Noord Caap tot
 Noordkijn.

Duytsche mijlen 15 voor een graad
 Engelsche en Franse mijlen 20 in een graad



When as Ingen lieth south thwart from you about foure leagues, it sheweth thus, and then Shipholm lieth south and by west from you.



When Helmsfey is south or somewhat more westerly about three leagues from you, it sheweth thus.



When as Helmsfey is south and south and by west five leagues from you, it sheweth thus.



Helmsfey being southwest seven leagues from you, sheweth thus.



Southsouthwest.

Thus sheweth Helmsfey being foure leagues off from it, when the flat hill is southsouthwest from you.



In this forme sheweth the Iland Stappen, when it lieth southsouthwest foure or five leagues from you.



Stappen when it is five or six leagues southwest from you.



The east end of Stappen sheweth thus when you saile alongst by it.

North Cape southeast and by east.

The Mother with the Daughters, southeast and by south.



Thus sheweth the North Cape sailing alongst by it, the points being from you as above is sheweth.



When the North Cape is southeast, and the Mother with the Daughters southsoutheast from you, then they shew themselves thus.



Thus sheweth the North Cape sailing alongst by it about three leagues from land, when you are close by the land, you may see the Mother alongst above the land.

Northkyn.

Mother with the Daughters.



Thus sheweth the North Cape when as the Mother with the Daughters are southsouthwest four leagues from you, then the North Kyn lieth southsoutheast from you, as is here above demonstrated.

Southwest and by south.

Southwest.

Southwest and by west.



Thus sheweth the North Cape the points being from you, as standeth there above written, and then you may see the Mother from the hatches appeare even above water.



Thus sheweth the North Cape when it is west and by north from you, and that you are three or foure leagues without North Kyn.

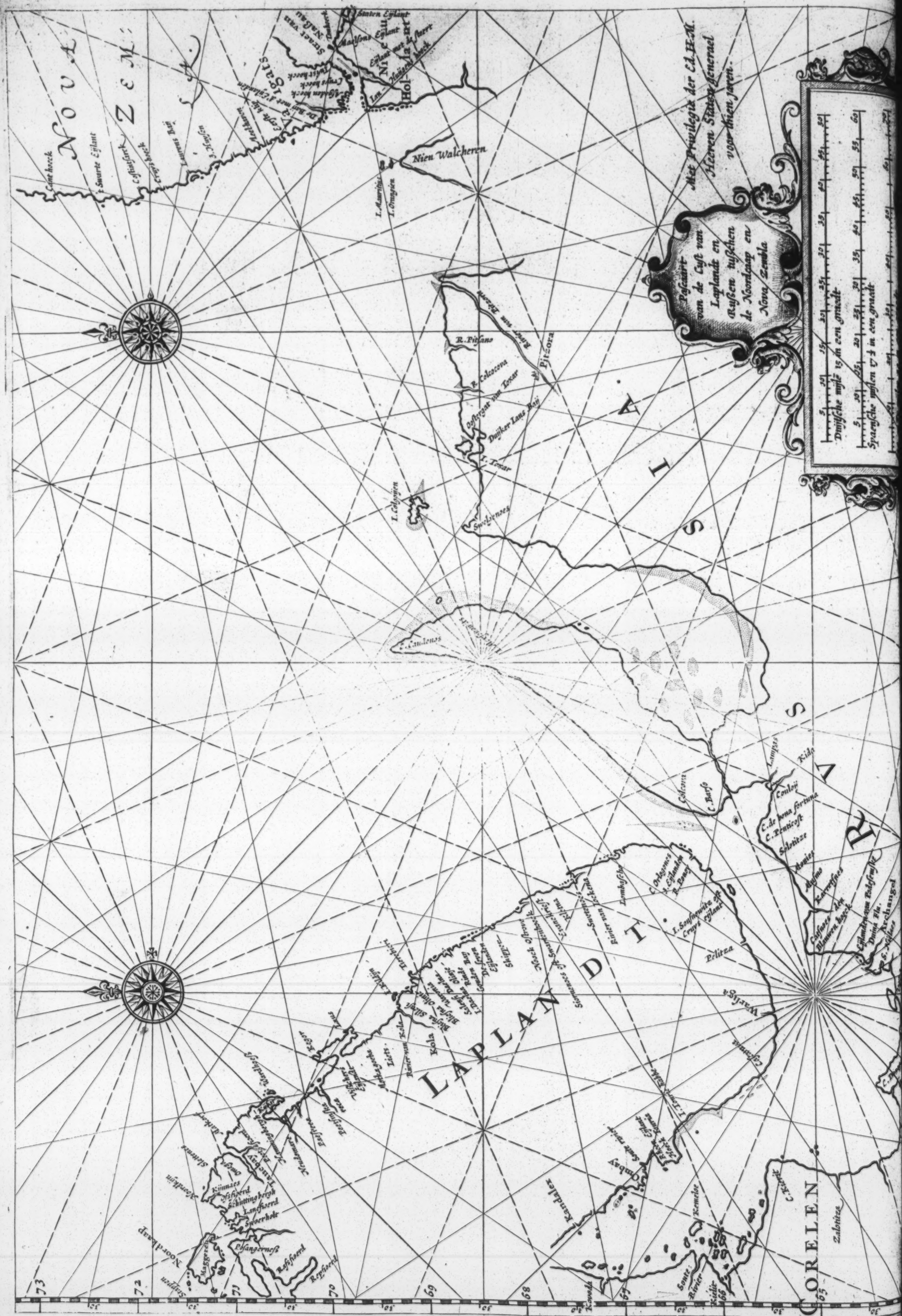
Southsoutheast



Thus sheweth North Kyn being southsoutheast eight or nine leagues from you, then lieth the north cape nine or ten leagues southwest from you, and then between both you may see yet more land in the southsouthwest.

The second part
S I X T H B O O K E
of the
S E A - B E A C O N
of the Easterne and Northerne
N A V I G A T I O N,
Containing
T H E D E S C R I P T I O N O F T H E
Seacoastes of Lapland and Ruffia, and
of the whole White Sea.

From the North Cape eastward to Nova Zembla.



THE SIXTH BOOKE of the EASTERNE AND NORTHERNE NAVIGATION,

Conteyning the Description of the Coasts of Lapland and Ruffia,
from the North Cape eastwards to Nova Zembla,
and of the whole White Sea.

CHAP. I.

The Coasts betweene the North Cape and Wardhouse.



Aft and by south about thirteen leagues from the North Cape lieth North Kyn. From North Kyn to Tannebay it is east-southeast tenne leagues, betweene both it is all a cleane coast, without Rockes or foule grounds, a high steepe craggie land, without anie strand.

When as you come sailing alongft past North Kyne, towards Tannebay, you shall meete first with the point of Slechtnes, a plaine point lying out, verie good to be known: and then Ommegae a Fisher village, standing on the sea side, even there to the eastwards of it goeth in the Tannebay, which is a great deepe River, which lieth in first south, and afterwarde south west, farre within the land, and doth divide it selfe into two partes, at the mouth of the River, it is at least two leagues or more broad, and all over verie deepe. He that is bound into the Tannebay, must run in all alongft by the west shoare, because he must ly by the west shoare, on the east side is no road or place, where men may ancker. On the foresaid west side are manie pointes and bays to see to, as if there where roads, but you must saile past them also along, untill that you see on the same west shoare a round hill, whereupon standeth a Warder, a little past that, stand some Fishermens houses, upon a lowe hommock, thwart of these houses runneth off from the land a lowe flatte point, you must runne in behind that point, and ancker before those houses, with an ancker to seawards, and a hawser fast on the land.

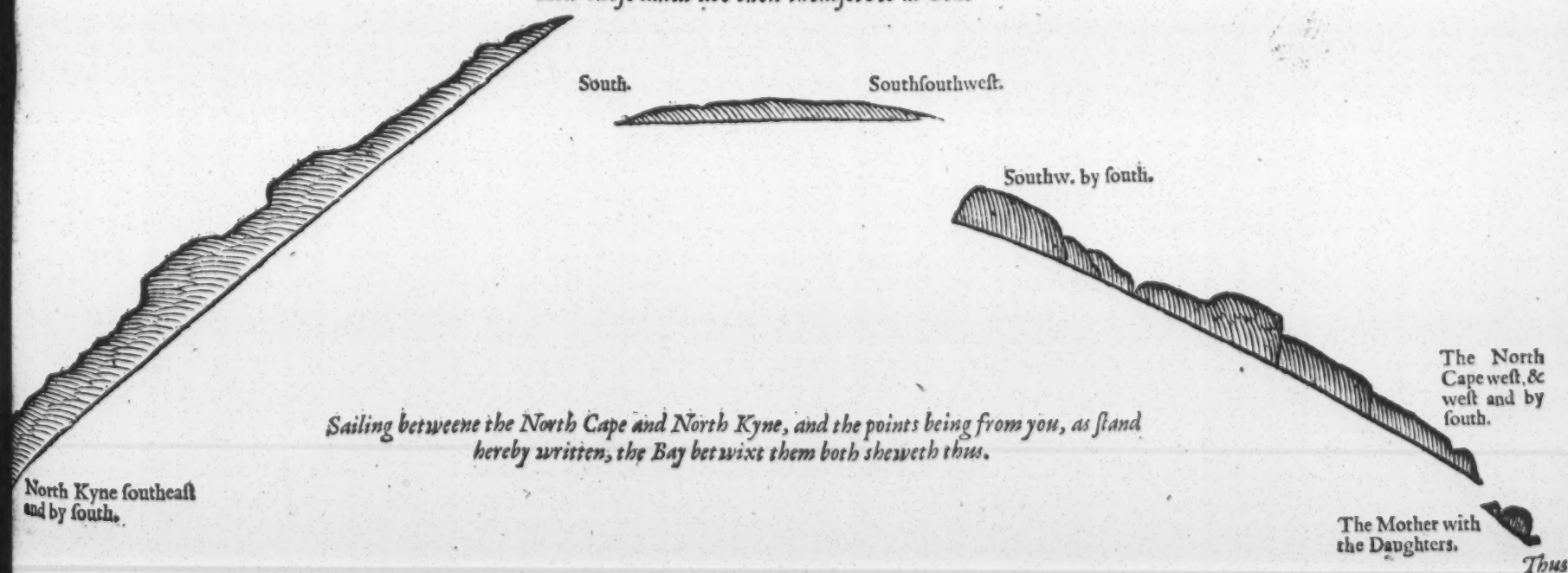
A little to the eastwards of Tannebay lieth the point, and the land of Matkorf, from thence to Wardhouse the coast lieth southeast and by east, southeast, and most southeast and by south sixteene leagues, betwixt them there is much high plaine land. Halfe waies betwixt both, but nearest Wardhouse, lieth a high hommock upon the high land, to

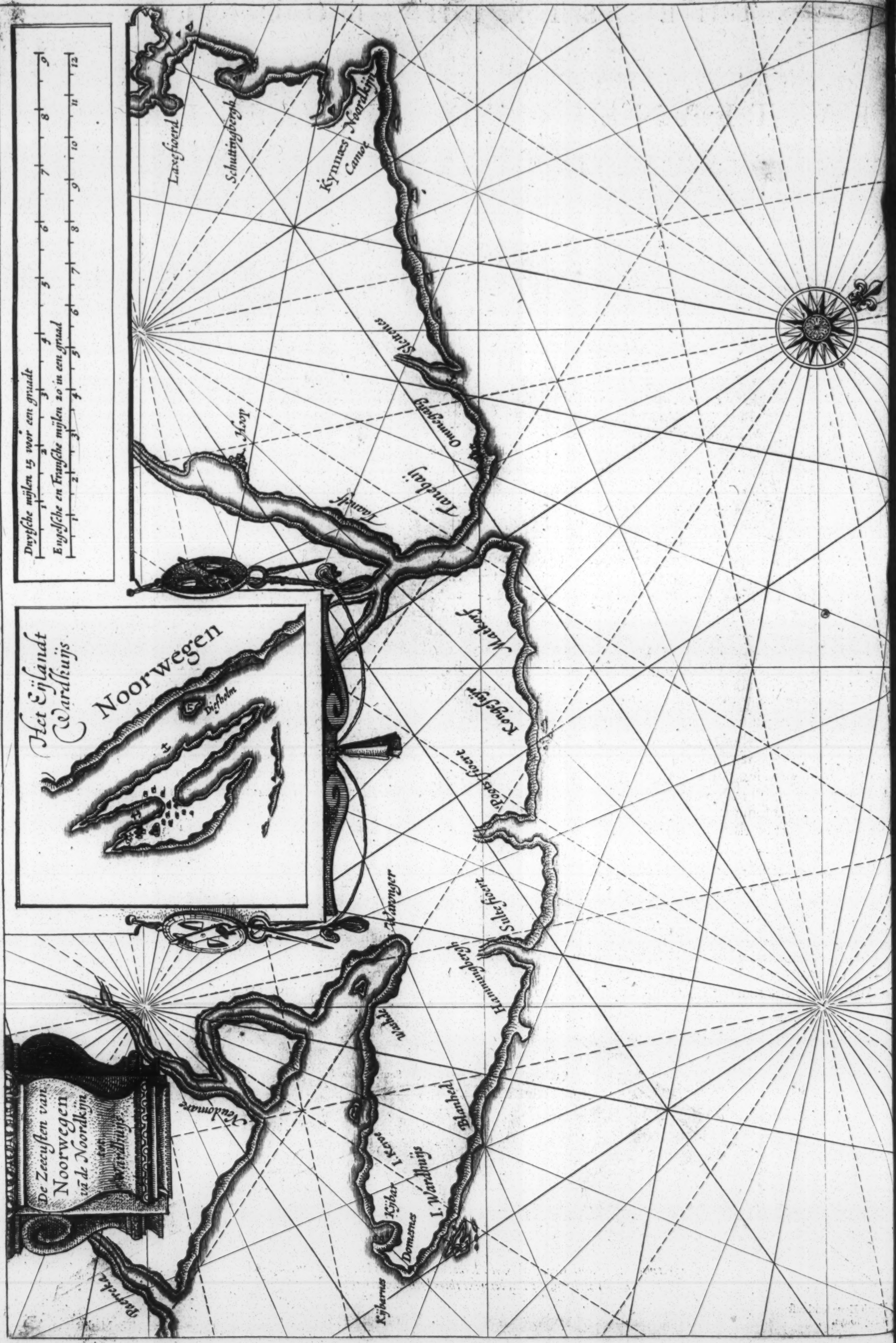
see to like a castle, or Countrie house, verie good to be knowne, being thwart of it close by land, it seemeth as if there were a great Sound, where men might saile into. Wardhouse are three little Ilands, with some little rocks also by them, the southermost is the greatest of the three, which onely is inhabited, upon it is a village of about 300 Norwaie houses with a castle, it is about a half league long, & lieth an English mile off from the land, lying as the coast most south and north, betwixt both it is all over deepe water. On the south side of this Iland, lieth in a haven or great bay about halfe waies the Iland, and likewise one, also on the north side, so that these two bays doe come so neare one to the other, that there remaineth no more them a narrow chindle strand about a stone cast broad, deviding so the Iland almost into two, the eastermost part is the shortest, and highest, the westermost the longest. Close upon the strand, on the east side of the souther haven lieth the Castle, to the northwards of it, upon the foresaid chindle strand, and about the Bay stand the houses. In the souther Bay it is good lying, but the best road is betwixt the maine land and the Iland, about halfe waies on the side of the Iland against a Sandbay, and right against the Castle, there is good ancker ground, in tenne or twelve fathome, landlockt for all winds, except for north and south winds, which blowe there right through, yet men have some shelter of some points of the Iland. Men may without feare come in there, betwixt the Iland and the Maine, either from the southwards or the northwards, it is all over clean and cleare, but he that commeth in from the northwards, must run somewhat nearer the Rock, where the gallows standeth upon, then the Iland, because there abouts the Iland is a little foul.

About a shotte of a Cast peece northwards from the greatest, ly the two smallest close one to another, seeming a farre off to be one Iland, are together not an English mile long, but high and rockie to see to, there ly also two or three rocks by them.

On this coast like as at the North Cape a northeast and southwest moone maketh high water.

How these lands doe shew themselves at Sea.

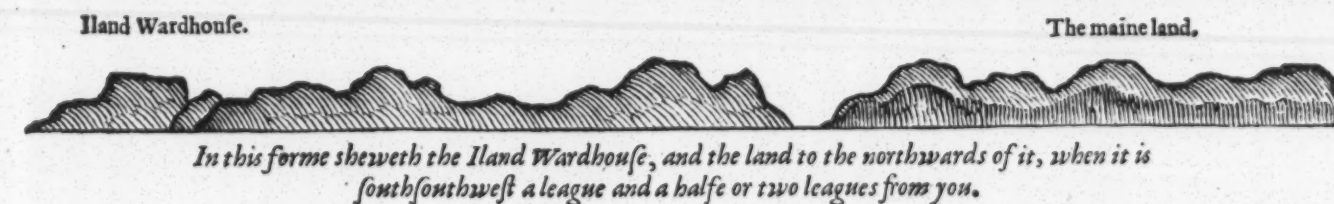
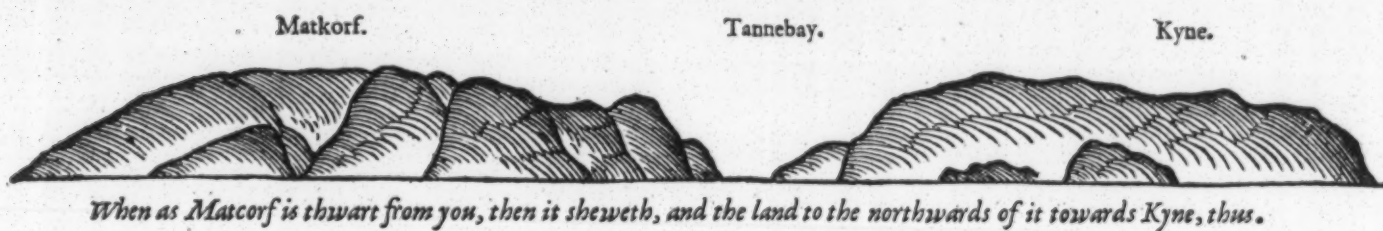
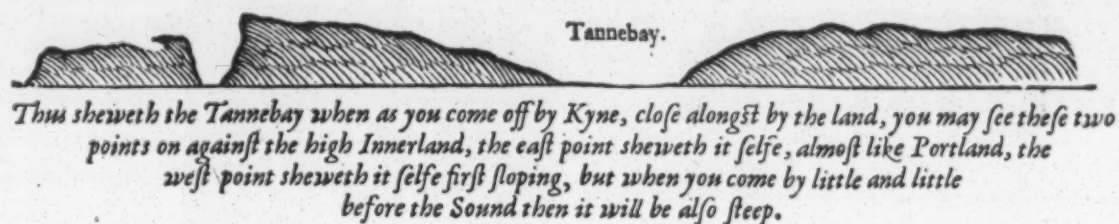
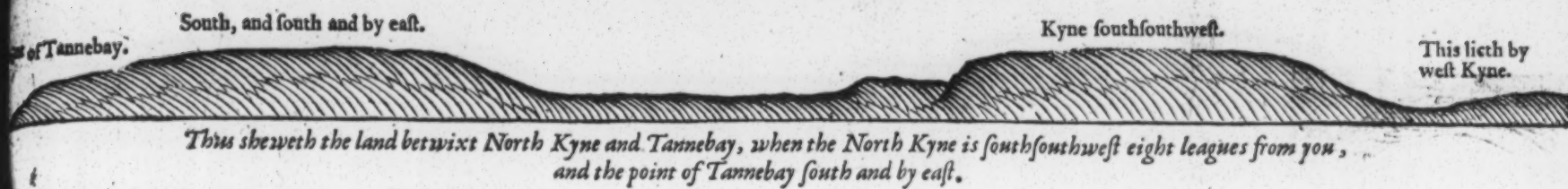




Duyfche mijlen 15 voor een graade
Engelsche en Fransche mijlen 20 in een graad

Het Eijland
Wardhuys
Noorwegen
Dijsholm

De Zeeuften van
Noorwegen
vā de Noordkijn
Wardhuys



CHAP. II.

The Coasts of Lapland betwixt Wardhouse and Kilduyn.

From Wardhouse to the point of Kegor or the Fishers Iland, the course is southeast and southeast and by south tenne leagues. Betwixt them both is a great bay, wherein are divers Sounds and rivers, amongst other, the River Pitfing, which is a great faire and large river, where men may goe in with great shippes, a good waies within the river is good road, there is taken and laden much Sammon, but there fall no other speciall wares. Southsouthwest from the point of Kegor ly two Ilands, to the southwards of them men doe runne into Monnickforde.

Kegor is a faire haven, lying at the north end of the Fishers Iland, a little within the point. There ly two or three Rocks at the north point of the haven, and also a suncken rock in the middest of the havens mouth: you must leave the suncken rock, with the other rocks on the starboard side of you, and runne in by the south shoare, and edge then

East. Water. vj. Booke.

in behind the foresaid rocks, and ancker there in seven or eight fathom, the havens mouth lieth in southwest, it is there so good lying as in any havens thereabouts on the coast.

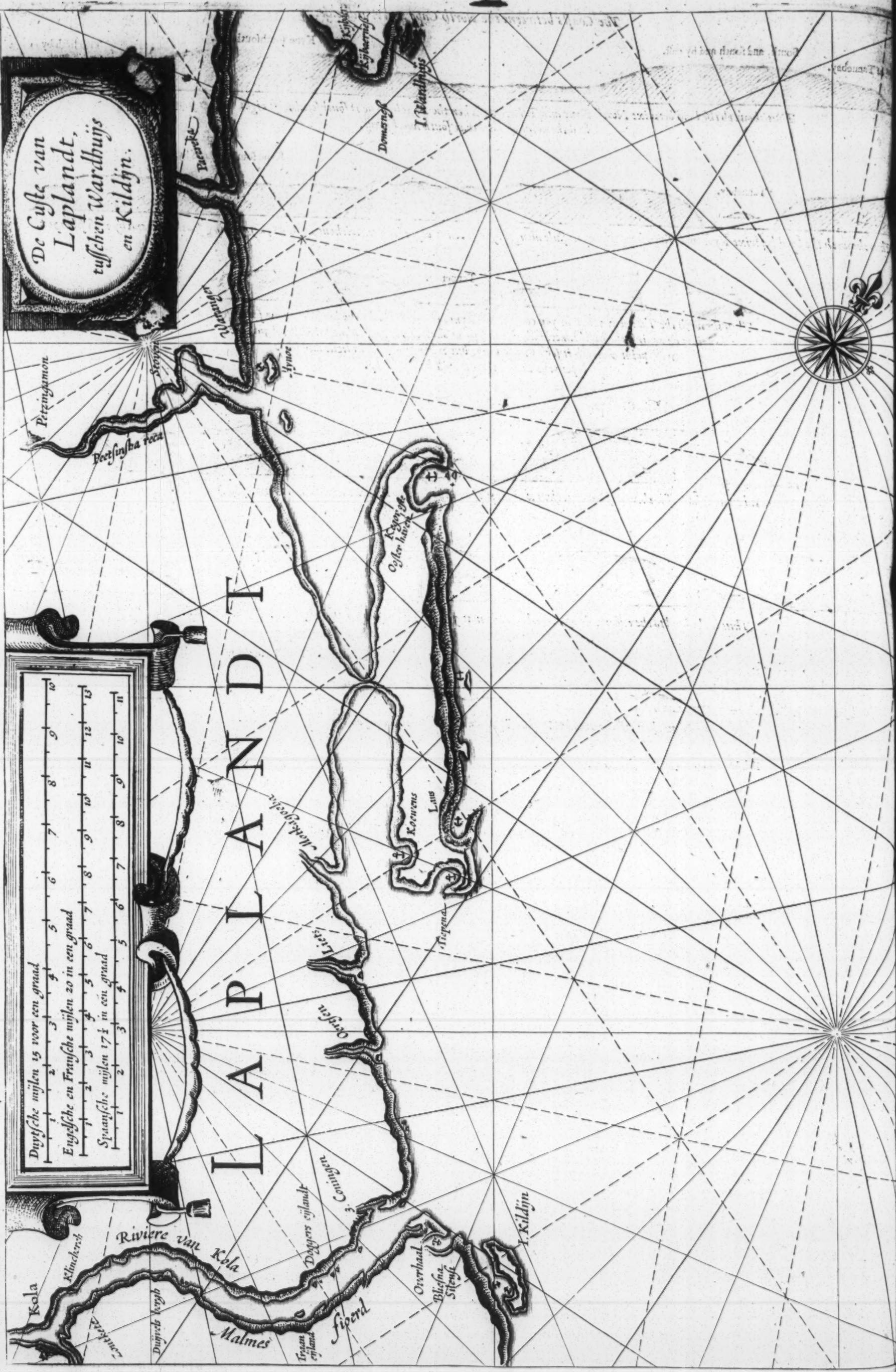
The Danes call this haven Easter haven, there was wont to be the Staple of the Fish, where every one must come to buy: thereof the Iland, whereon Kegor lieth, is yet called the Fishers Iland.

It is indeed no Iland, but verie neere: it is fast to the maine land, with such a very small neck, that the Russes, which come from Kilduyn, or the river of Kool, and are bound to the River Pitfing, doe go alongst within this land, and haell their boates over that smal neck, for not to goe about a seaboard.

From Kegor to Laus the course is alongst the shoare southeast and by south somewhat easterly nine or tenne leagues. This is a right plaine coast, without points or bays, all alongst by Laus to Tiepena, but the south point of Laus lieth out a little, upon which stand two Warders, to the northwards of that point is the haven of Laus, a faire sand-bay, there is very good lying for southerly or easterly winds, but not for northerly winds: the winds betweene the north-west and northeast doe blowe there in open, and make there

T

there



De Cuyte van
Laplandt,
tusschen Wardhuys
en Kildijn.

Duytsche mijlen 15 voor een graad
Engelsche en Fransche mijlen 20 in een graad
Spaansche mijlen 17½ in een graad

LAPLANDT

Kola

Kluchers

Riviere van Kola

Wardhuys

Duytsche Kuyt

Malmes

Tram
eiland

Fjoerd

Doggers eylandt

Coningen

Overhaal

Blesna

Sleuse

I. Kildijn

Oerfen

Lies

Wokgeest

Koenens

Laus

Koenen
Ogter huyt

Demong

I. Wardhuys

Pacard

Wardhuys

Lynce

Peetsingha recca

Petingamon

there a very great hollowe sea, men ly there in twelve, ten, and eight fathome, according as they runne farre in, the farther the showlder, but all cleane rising sandground.

From Laus a little towards Keger lieth a little Iland, behind which is good anckering for easterly winds, in cleane sandground, but it is somewhat narrow.

From Laus to Tiepena, it is a great halfe league, at the point ly some little rockes, but you can not see them, before you be close to them. Tiepena is a faire haven, when you come from the northwards, you must runne so farre to the southwards, alongst by the shoare, untill that you see open into it, and saile in amidst the Channell. When as you come from the southwards, the haven openeth it self: being come in, you must edge up to the northwards, and ancker there, there you ly landlockt for all winds, there are no dangers which may hurt you, but it is all over cleare and cleane sandy ground.

A little about the point, to the southwards of Tiepena, which is on the southwest side of the Fishers Iland is another faire haven, where men may goe to ancker, called Kowens.

From Laus to the River of Kola the course is south and by east and southsoutheast about tenne leagues. But Kilduyn and Laus ly southeast and by south, somewhat easterly, and northwest and by north somewhat westerly also ten leagues asunder.

For to saile up into the River of Kool or Kola, you must goe from Laus, or the south end of the Fishers Iland towards the River southsoutheast and south and by east, run about by the high land of Podenwolck, and then the River shall open it selfe very wide. When you are by the point of Laus, you may see the Iland Kilduyn, and the River of Koole, or the land by it. Betwixt Laus and the River of Koole, is also a great bay.

When as you are in the mouth of the River, it lieth in first south and by west, and then southsouthwest, to that Iland, which standeth marked with A in the Carde of this River, and then by little and little southwest and by south, alongst by the Iland marked with B unto the Trayne Iland, then southwest and by west, and by little and little about the point west and by south, afterwards in west, unto Divels point, over against it lieth the Whitestone, which lieth upon the land, thwart of it is good road. From thence againe west and by south, westsouthwest, southwest, & southsouthwest unto Kool.

When as you come into the River, and will seeke road there, you must keepe alongst by the west shoare, being somewhat within, you shall see a little Iland lying close by the shoare: from thence somewhat further about the high point is a Bight or Bay, and in that Bight a Sandbay, where men may save a shippe without ancker or cable, that is a faire Sandbay, where men may runne in all alongst.

Alongst by the north side it is five fathome deepe, and cleane sand ground, men runne in there betwixt the two points, but there lieth a black Rock in the narrow betwixt both shoares, which they must leave lying on the starboard side, within that rock it is three and two fathome deepe unto the strand, within there is a faire greene field.

A little without the bay ly two Ilands, whereof the outermost or eastermost is the smallest. When as in sailing up the River you come alongst by these two foresaid little Ilands, about halfe waies to the Iland marked with A, there is also good road, at the west shoare, you shall see upon the high land three Warders, called the three Kings, thwart of them is the road.

When you are somewhat past the Iland, A, you cannot see the River any more open, but it seemeth to be shut, and close, for that Iland by A, commeth then under the high land, on the east side.

Vnder the Iland marked with B is also good road and cleane sand ground.

Likewise is also good road under the Traine Iland, that is reckoned for the halfe of the River, to wit off from the mouth of Kool.

When as you come now a little past the Traine Iland,

where the C standeth, then you shall see out a head a black blowe hill, called the Divels hill, it seemeth there to see to, as if the River were close and shut. It is best sailing alongst by the starboard side, there you have most all ground close by the land. There are many Bights, points, and bayes, which are not all to be described.

On the other side men doe not come so commonly, (except it be against their wills) there seeme also to be many bayes and roades, and also some little rivers. When as now you come alongst by the Divels hill, where the D standeth, past the Whitstone, then you may see the Klinckhill on the west side, and almost al alongst unto Kool. When as you may see the Klinckhill, there is ground by the west shoare for to ancker in, then there are on both sides no dangers, but when as you come so far into the place, where the letter E standeth marked, there you must somewhat shunne the west shoare, because of a little showld which shooteth off from the shoare, and keepe in the middle of the channell, untill that you come against the Klinckhill, there you must againe go close alongst by it: in the middest of the farewaie lieth an Iland of rockes, which at high water is covered, whereof you must take good heed.

From the Klinckhill unto the Robben Iland saile all alongst by west shoare, the Robben Iland is also covered at high water, but when it is under water, then ancker thwart of the burnt trees. Thwart of the Robben Iland lieth a very great rock, as soone as you be thwart of the high land, looke out carefully for it, and keepe without it, or to the northwards of it, to wit a bow shot, there is the road, there you may ancker by the shoare so showld as you please, it is there good lying, and there you begin to see Koole alongst by the house. Betwixt the Iland Kilduyn & the river of Kola, somewhat nearer the River then the Iland, lieth a haven called Bliefna Silensi, that is to say, the next to Silensi, there you saile in by a round reddish Hommock, being come within it, you must edge up to the westwards, so that the haven is altogether shut, and that you can see no sea, you may ancker there so deepe or showld as you will, it is there everie where cleare and cleane white sand ground, & somewhat oazy and softe, there you may also without feare saile on against the shoare in the oaze, and so may save a shippe without ancker or cables.

The Iland Kilduyn is about two leagues long and one league broad, and lieth westnorthwest and eastsoutheast alongst the land, like as also the channell betwixt the Iland and the maine land, which is at some places about a halfe league broad, and at some places narrower, but al over very deepe and cleane. About the middest, yet nearest the east end, is a fair close road, betwixt two pointes, that ly out towards the maine land, there men ly under the Iland, close to the shoare, before the Lapstents, under the eastermost point, which is a low plaine point, in twelve, thirteene, or fourteene fathome sand ground, more to the southwards, it is verie deepe, you shall soone have fiftie and sixtie fathom.

If you will goe to ancker under Kilduyn comming from the northwardes or the westwardes, then runne about by the west end, in betwixt Kilduyn and the maine land. When you are come somewhat within, you shal espie a little round Iland, there the channell beginneth to be narrow, yet it is broad enough for to turne to windwards through, saile forth towards the southeast end, untill you come in betwixt those two points, and runne to the foresaid low point, and ancker there within in the bight, before the cabbens so neare to the land as you please, there you lie landlockt for all winds, as if you lay within a towne in a close haven.

For to saile in from the eastwards, you must saile in to the westwards by the east end, so long untill that you come by the foresaid lowe point of the Iland, then edge up about it to the northwards, and run into the foresaid bight, before the Cabbens, and ancker there in twelve, thirteene and fourteene fathome, that is the chiefeft road.

At the north or east end of Kilduyn, betwixt the Iland & the maine land, there is also a verie good road, in eight, ten or twelve fathome, where men may lie sheltered for all windes. There abouts is on the Iland a good water place,

there the water commeth running off from the high land, there men may goe lie by it, and fill their caske lying in the boat.

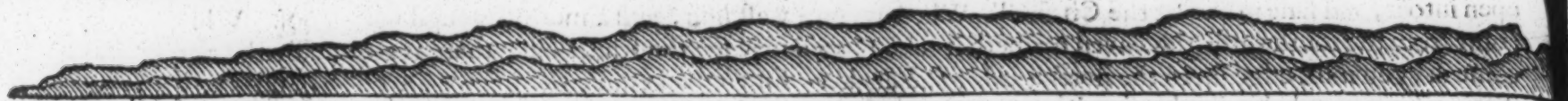
You may also ancker under the maine land, betwixt the narrow, and the Road of Kilduyn, at the place where the ancker standeth marked, in the carde. At the east end of Kilduyn lieth also a Fishers village, called Kammen, at a high point, which is called the Sacrifice point.

Of the tydes, and course of the streames.

AT Kilduyn an eastsoutheast Moone maketh the highest water.

Alongst these coasts of Lapland to the eastwards of the North Cape, the floud commeth out of the northwest and northnorthwest, and so runneth alongst the land unto Orlogenes.

How these lands doe shew themselves at sea.



Thus sheweth the land of Keger or the Fishers Island, when as you saile alongst by it foure or five leagues without the land.



Thus sheweth the land of Keger, or Fishers Island, when you saile alongst by it coming from the westwards.

Kilduyn.

Mayne land.

River of Kool.



In this forme sheweth Kilduyn, when the steepe point lieth south and by east, and the River of Kool southsouthwest about five leagues from you, the land to the westwards of Kilduyn is verie hillie, and the river dath sheweth it selfe verie vvide open, as here standeth pourtraied.



The river of Kool.

Thus sheweth the Iland Kilduyn, when the west point lieth southwest and by south, and the east point south and by west, somewhat westerly from you, the River of Kool lieth then southwest and by west from you, the maine land that you may see to the eastwards, lieth then southeast and by south somewhat southerly from you: the land of Lau you may then yet also see in the northwest.

Iland Kilduyn.



These three last figures by the Croffes belong one to the other.



Point of the Fishers Island.



Thus sheweth the Iland Kilduyn, and the land to the northwards of it in the bay towards Fishers Island, when as you are betwixt them both, seven or eight leagues from land, Kilduyn being about south, southsouthwest from you.

CHAP. III.

Of the Coasts betwixt Kilduyn and the seven Islands.

From the Iland Kilduyn to the point of Tiribiry, the course is southeast, and southeast and by east about five leagues, betwixt them is a great bay. In this bay, a great league from Kilduyn, lieth a high Iland called Bliefna Olinie, which is the next or the nearest Olinie, behind it, under the maine land, nearest the south end of the Iland is a good road, where 3 or 4 shippes may lie verie well.

There lieth a round hill, or high hommock upon the maine land, which sheweth out above all the other hommockes, and is verie good to be knowne, upon which standeth a high croffe of two croffes one above the other, to the northwardes of it lieth a flat point, thwart of it lie some rockes alongst the shoare, which at high water are covered.

At the south end of the Iland Olinie, a little from land, lieth a rock almost even with the water, but you may alwaies see it well by the breaking of the water.

To the northwards of the Iland about an English mile, lieth a rock not farre from land, and also to seawards from it a suncken rock, which you cannot goe over at low water.

He that will (comming from the northwards) goe to ancker behind Olinie, must runne a good waies to the eastwards of this foresaid rock, alongst to the northwardes of the Iland, for to avoid the foresaid rock. Being come behind the Iland, you shall espy the foresaid round hommock with the croffe, you must not runne past the croffe, but leave it on the larboard side, and saile in close by it for to avoid the foresaid rockes which lie off from the flat north point, the point with the croffe is verie cleane and so steepe, that you might lie with a ship on against the shoare without any hurt.

He that will come into this Road from the southwardes, let him runne alongst by the coast, which is verie cleane, untill

Bliefna,
Olinie.

LAPLANDT.

*Dele clip leijt met hoeh
water boven*

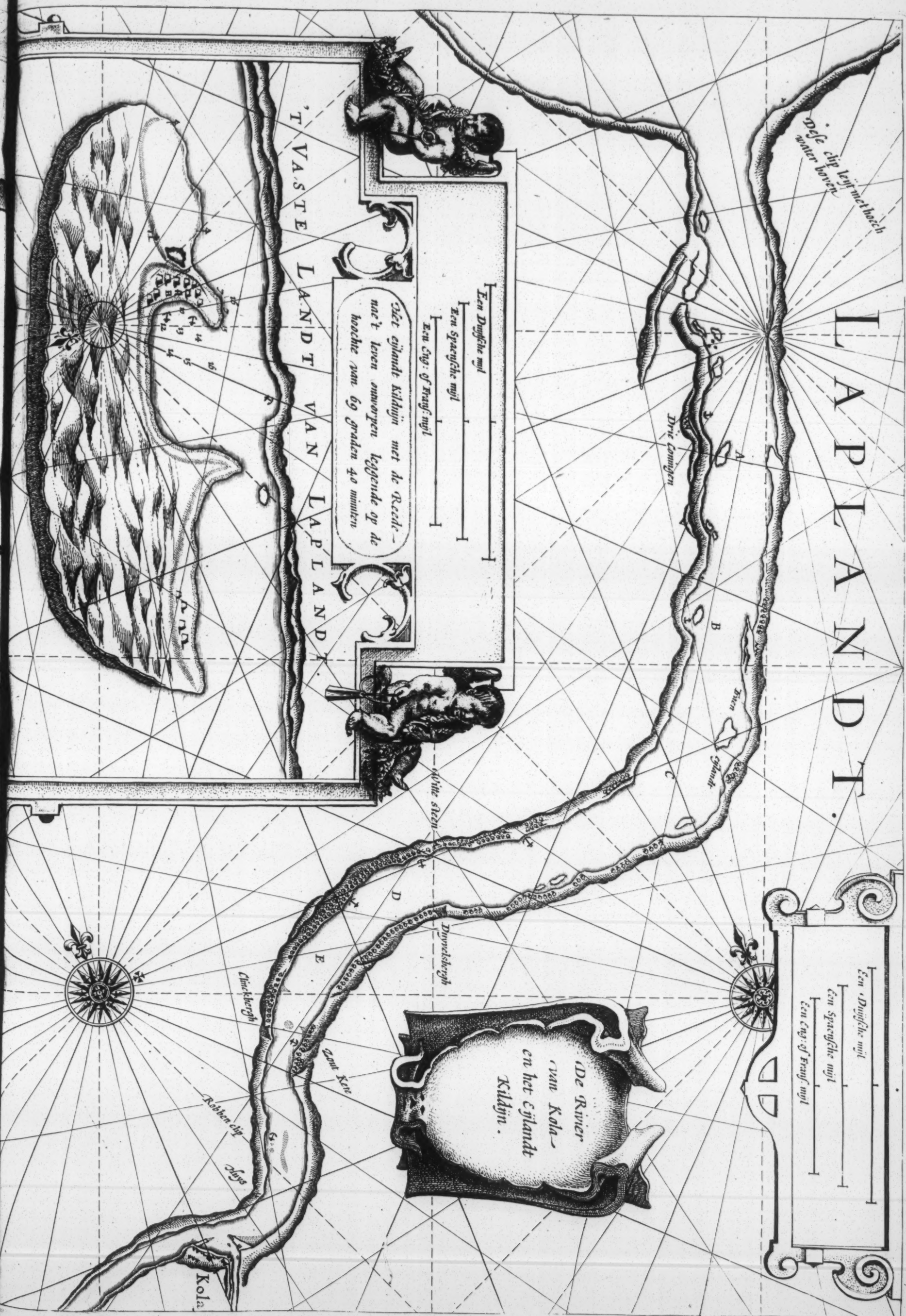
Een Duijckhe mijl
Een Spaensche mijl
Een Eng: of Frans: mijl

*De Rivier
van Kola
en het Eylandt
Kildijn.*

Een Duijckhe mijl
Een Spaensche mijl
Een Eng: of Frans: mijl

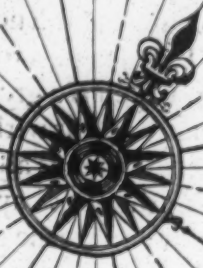
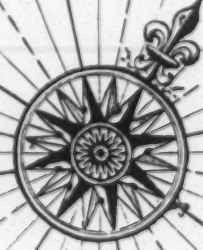
*Het eylandt Kildijn met de Reede
naet leuen omwoyen leggende op de
hoehre van 69 graden 40 minuten*

T VASTE
LANDT VAN LAPLANDT.



Laplandt tusſchen
Kilduyn en de ſeven
Eijlanden

Spanſche mijlen. 174. in een Graad
Engelſche en Franſ. mijlen. 20 in een Graad



untill past the foresaid point with the crosse, and edge up close about by it, as is before said.

Men doe ancker within the point in seven, fixe, five, four, and three fathome, so deepe or showld as they will, there can goe no growne sea at all.

About halfe waies betwixt these Ilands Olinie and Tiribiry is another haven or great Bay, where men may lie landlockt for all windes.

Tiribiry.

Tiribiry is a great River and off-water, where is great fishing of Sammon, there men may goe in with great shippes, and ancker everie where within it where they will in good sandy-ground, it lieth in most south, and afterwarde more westerly, the eastermost point lieth out more to seawardes then the other, so that it maketh a bay, where men ride under for a northwest wind.

Waronia.

Two leagues to the southwardes of Tiribiry lieth Waronia, which is a great sand-bay or haven, which at the mouth is narrow, but within it is a broad sound, there is also an off-water, where is also much Sammon caught.

Within this bay it is every where good anckering, showld water and cleane ground.

Before the mouth of this haven lie three little Ilands, behind them is also good road.

Gabriele.

Two leagues or two leagues and a halfe to the southwardes of Waronia, lieth Gabriele, a tyde haven, which falleth dry within, so that men may goe over there dry at low water, it floweth there twelve foot up and downe, a southsouthwest moone maketh high water on this coast.

In the mouth of this haven lie three Ilands, two on the north side (which are the lowest) and one the south side, that is the highest, you must runne nearest the southermost when as you will saile in there: being come within the Ilands, you must edge up to the northwardes behind the two northermost Ilands, and ancker there on the north side of the haven, there it is seven and eight fathome deepe cleane ground.

*Daelna
Silenfi.*

About a league to the southwardes of it lieth Salenfi Daelna, that is to say, the farthest Salenfi; but betwixt them both a little to the northwardes of Salenfi, lieth yet a great in-draught, which lieth in at least two leagues into the land, and is about so wide as the River Tye before Amsterdam, there may lie a great multitude of shippes, it is there broad and all over good ancker-ground.

A little to the northwardes of this in-draught lieth a little Iland, or rock, somewhat high, about which you may saile within, to wit, through betwixt those rockes and the land, but may make no road under them.

Salenfi Daelna is a great broad bay, before it lie three Ilands, which are to see too gray of colour, as the maine land.

To the northwardes of these Ilands upon the point of the bay, standeth three great Warders, and a little to the southwardes of the Ilands, on the maine land, lieth a steepe hill, by which markes this bay is very good to be knowne.

If you will saile into this bay comming from the northwardes alongst the shoare by the foresaid great In-draught, a little to the northwardes of this bay, you must looke out for those foresaid great Warders, leave them on the starboard side, and saile in close by them, through betwixt that point and the Ilands, first westsouthwest somewhat within, and then more southerly, untill behind the Ilands, and ancker there in five, fixe, or seven fathome: you may also saile further to the southwardes into the bay, so deepe as you will, there it is all over cleane. When you come before the channell, it seemeth to bee verie narrow, but it is broad enough.

To the southwardes of those Ilands is also a channel which is very narrow, but yet for need you may saile out there. The southermost Iland, that is, whereupon the Fishermen dwell, is fast to the northermost with a sholwd whereupon is at high water ten or eleven foot water, but at low water you cannot goe over it.

*Daelna
Olinie.*

Two little leagues to the southwardes of Salenfi lieth the Iland Daelna Olinie, that is to say, the furthest Olinie, it is an Iland almost of fashion like Bliefna Olinie, at the north end high, at the south end lower, and upon the end verie

steepe, it hath in the middest, (but somewhat neerer the south end then the north end) a low valley, where at high water the sea doth almost runne alongst over it.

Behind this Iland, not under the Iland, but under the maine lands, are good roads.

For to come in from the northwardes behind this Iland, it is a broad, large, and verie deepe channell, without any dangers, but if you will saile in behind it (from the southwardes) then you must runne in close by the Iland, for to avoid a fowle and stonie riffe which lieth off from the maine land, halfe waies to the Iland, and so showld, that it falleth dry with spring tydes at low water.

About halfe waies the Iland, nearest the south end, is a point lying out from the maine land towardes the Iland, to the northwardes of it men doe ancker in fixe, seven, or eight fathome.

When as you come in from the northwardes, you may, (so soone as you come within the points) luffe up to the northwardes close about the point of the maine land into a bay, and ancker there in eight, fixe, five or four fathome, according as you saile farre in, there it is verie good lying. In these roades under the maine land it is all cleane and flat, rising ground, but under the Iland it is deepe, & the ground rising verie steepe, and therefore it is not good anckering there.

Betwixt this Iland Daelna Olinie, and Silenfi ly three little black Ilands, where is very good road under them in eight, seven, and six fathome.

From Daelna Olinie to Rinde are five leagues. Rinde is a verie faire haven, before it lie foure little Ilands, where men may goe to ancker behind them behind these Ilands this haven hath two bayes, upon the point betwixt them both, standeth a great crosse, the southermost bay is farre the greatest, into it commeth also a river or off-water, where men doe catch Sammon. The middlemost Iland (which is the northermost save one) is the greatest and highest, upon which standeth a great Warder, the northermost is somewhat long and small, and so low, that at high water the sea runneth up a good waies upon it on both sides, and so maketh that Iland smaller.

Betwixt that Iland & the maine land, or the north shoare of the havens mouth, lie the suncken rock, which you must leave in comming in, on the larboard side, and runne in close by the maine land, this channell is so narrow, that you cannot saile it in, except you have a large wind, at low water, there remaineth no more then nine or ten foot depth.

To the southwardes of that great Iland, lieth an other Iland that is indifferent high, and the southermost of them all, betwixt that and the point of the maine land, lieth in the souther channell, which is broad and deepe enough, but when you saile in there, you must runne nearest the Iland, for to avoid a suncken rock which lieth at the foresaid point of the maine land.

These channells both from the southwardes and from the northwardes ly in both alongst the shoares, when as there you come then within the Ilands you may ancker there all over where you will, there it is broad and large, and everie where cleane and cleare. Men do ancker commonly under the greatest Iland thwart of the great Warder, and also behind the northermost Iland in five, foure, or three fathome, there it is verie good lying, but with a southeast wind, the sea commeth a little rowling in, but there can goe no great sea.

Farre within the southermost bay, almost before the river, lieth a rock, but above water. Without the greatest & the southermost Iland, lieth a little Iland, or great rock, somewhat round, you may saile out and in betwixt the southermost and the greatest Iland, alongst to the northwardes of that little round Iland, that is, you leave the southermost Iland with the outermost little round Iland both on the starboard side, and the greatest Iland with the Warder on the larboard side, when you sail out, this is a very narrow channell, but verie cleane and cleare, so that there is nothing to be avoided, but onely a little suncken rock which lieth at the north end of the outermost little round Iland, & falleth dry

dry at low water, nevertheless it is not good to use it, except it were for need that you could not doe better.

He that is bound into this haven, must run close alongst by the shoare, for to get sight of the foresaid Islands, for by reason that the inner land is high, the Islands lie so under the land, that men can hardly see them, when they be any thing off from the shoare.

A halfe league to the southwardes of Rinde is another great Bay, or haven, before it lie two little high Islands, upon the northermost standeth a great crosse, you may saile in there about on both sides of these little Islands, and also through betwixt them and ancker where you will in fifteen, twelve, eight, or five fathome, deepe or showld, according as you saile farre in, and lie there sheltred for all windes, but when the wind is hard out of the sea, thwart upon the shoar, there will come in somewhat a rowling sea, but there can

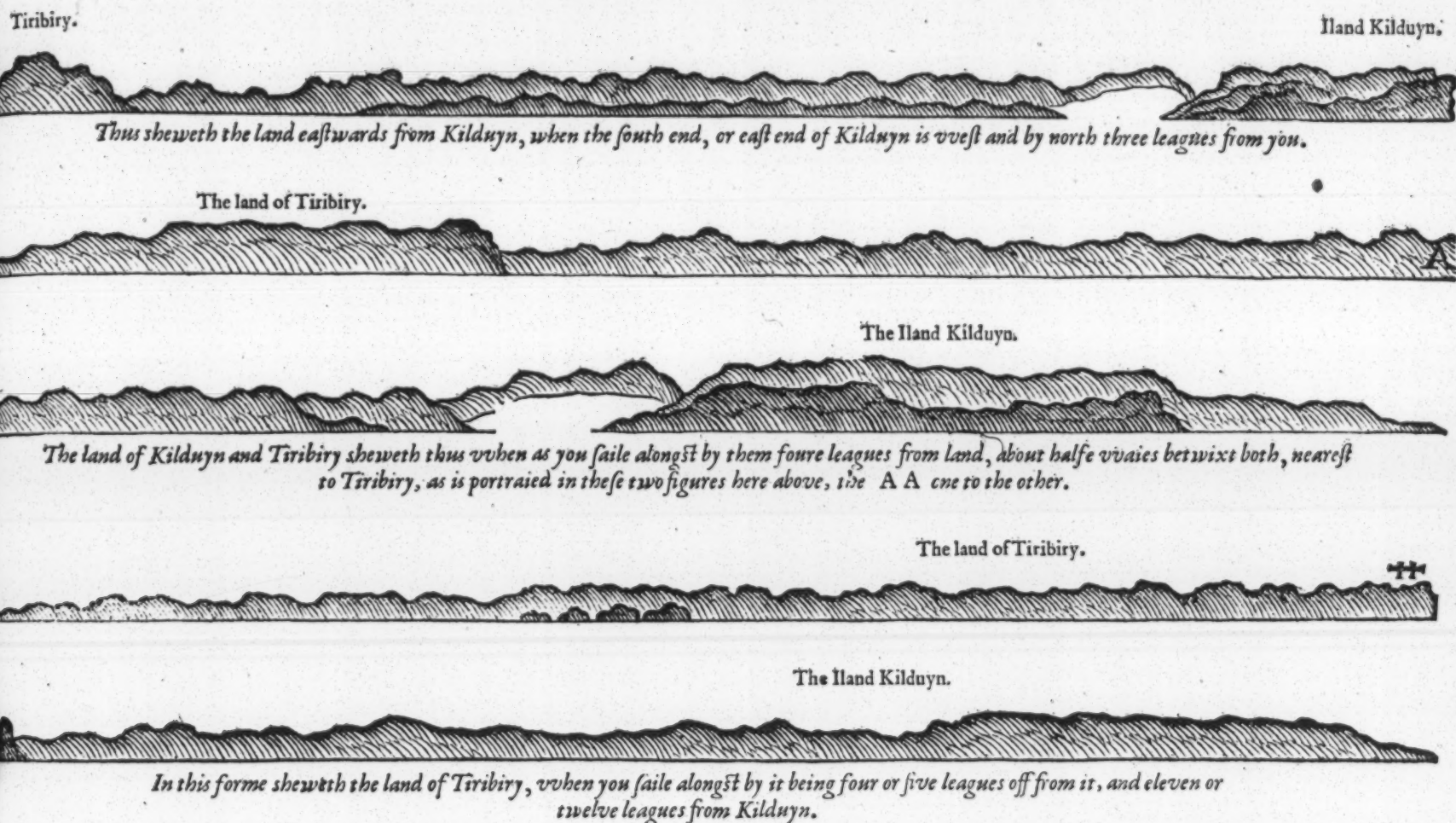
goe no great sea that can hurt you. A little to the northwards of this haven lieth a low long Island close to the shoar, whereby you may also know this coast, you may saile through betwixt this foresaid Island & the maine land without any danger.

From this haven to the seven Islands are four great leagues. A little to the northwards of the end of the seven Islands, lieth a faire great sand-bay, where is also good ankering for southerly and southeast windes, but not for easterly windes, with a northeast or sea wind, it is bad lying there, for there is no shelter for them, men do ancker there in twentie, fiftene, or twelve fathome, according as they lie farre or neare to the shoare. The Russes call this bay the Golden Bay, because the strand is of red sand.

Golden bay.

On all these foresaid coasts a southwest and northeast moone maketh high water, like as on the former.

How these lands doe shew themselves at Sea.



CHAP. IV.

The description of the Seven Islands, and the Coasts from thence southwardes to Svetenos.

THe Seven Islands lie all of them alongst the shoare, the first or northermost is farre the greatest of all, a high Island. The foure northermost follow close one to the other, and ly about an English mile, or a shot of a cast peece, a little more or lesse off the land, so that men may saile there through betwixt. The fifth is a little round Island, and lieth neerer to the land, there you cannot runne through within it, which is fast to the land with a showld of rockes, whereof some ly above, and some under water. The two southermost ly a good waies to the southwardes of the fifth: betwixt them and the maine land you may also saile through, you may also runne through in and out betwixt these same Islands everie where, except betwixt the second and third to tell off from the northwardes, betwixt them both it is fowle.

Betwixt these seven Islands and the maine land, goeth a strong tyde, as well of flood, as of ebbe, whereof men must be verie carefull.

Betwixt the northermost and the maine land is a good road (thwart of the south end of the Island) under the maine

land, there is a faire sand-bay, with an off-water, where is much Sammon to bee caught, but it is not there used.

A little to the northwards of this Sandbay, lieth a little Island betwixt the great Island and the coast, men doe ancker to the southwardes of that little Island, thwart of the Sandbay in seven, sixe, five, and foure fathome, so showld as they will, there is a verie even sand-ground, rising so even as if it were planed.

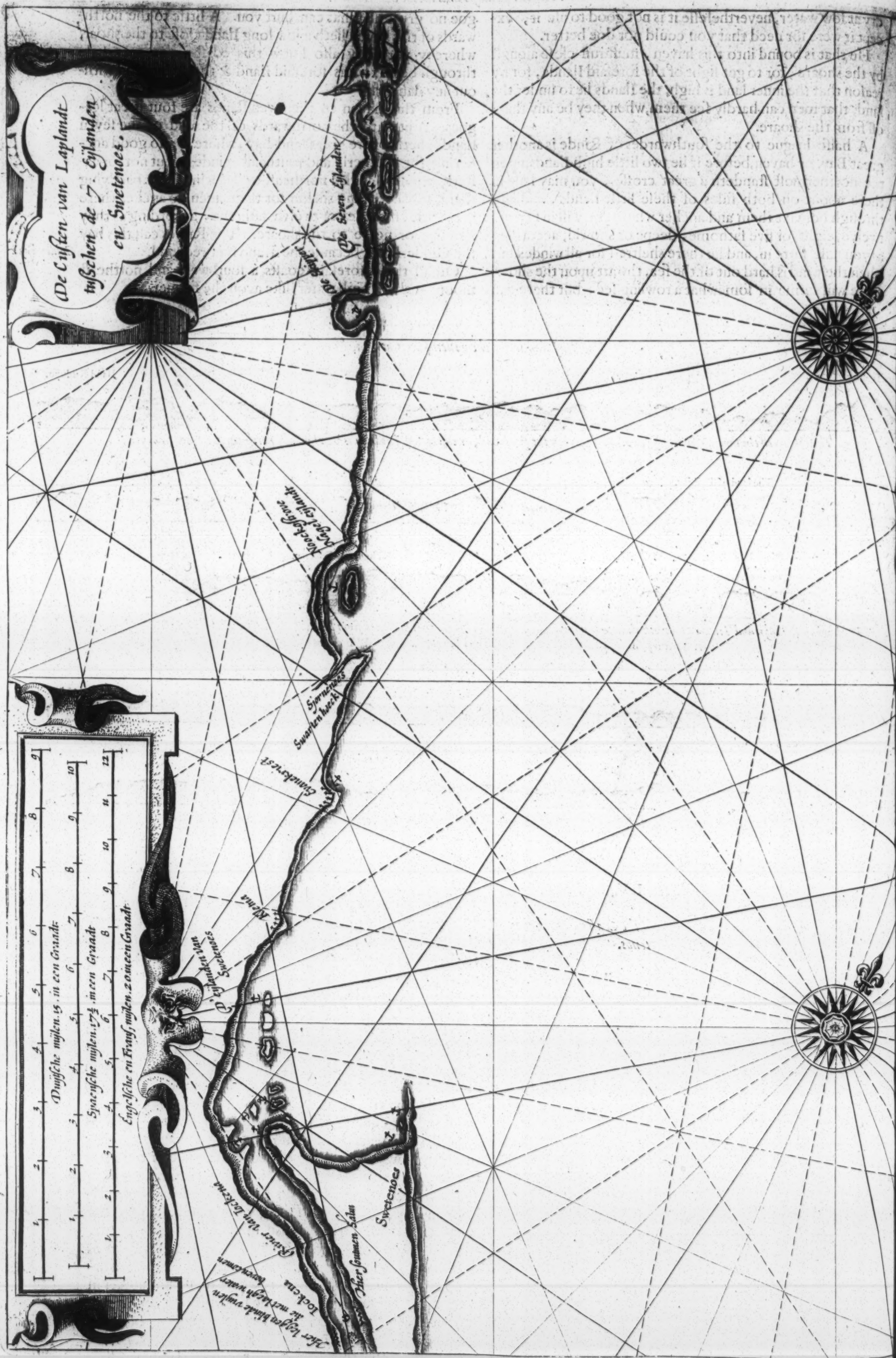
Over against the foresaid bay men may make road under the south point of the Island, thwart of a little bay, there they bring a howser on land, and an ancker to seawards in nineteene fathome, there they ly somewhat more out of the tyde then in the bay over against it. Betwixt this great Island and the coast is about two third parts of the channell towards the maine land, flat rising ground, and the other third part towards the Island deepe, the neerer the Island the deeper unto eightene and nineteene fathome.

About halfe waies betwixt that foresaid little round Island, and the north point of the greatest Island, stand on the maine land some little Lappish houses, or a little village. Betwixt the second and third Island, or nearest thwart of the second, to tell off from the northwardes, lieth yet a little village, thwart of it is a bay where men may ancker in tenne or twelve fathome all cleane sand-ground, but with a southeast wind there commeth in a rowling sea, but with northerly windes it is very good lying there.

Second and third Island

Thwart of the fourth Island on the maine land, is also a sand-

The fourth Island.



sand-bay, where is also good road in seven or eight fathom for a northwest or north wind, but with an east wind it is there bad lying, that bloweth there in open, through betwixt the fourth and fifth Iland.

Even at the end of the seven Ilands is a great indraught, or bay; which the Ruffes call the Schipper, which is narrow at the comming in, but within indifferent large and wide; within it, is good road in 12, 8, and 4 fathome cleane rising ground, but with northeast wind it is bad lying there, that bloweth there flat in.

About nine leagues to the southwardes of the Seven Ilands, lieth a point called Siornenos, that is to say, Black point, it is so called, because it is verie black to see to, there within it the land is high, & goeth downwards low towards this point, almost as Swetenos. At this point the land be- ginneth to alter in forme, to the northwards of it the coast is altogether high, but to the southwardes of it all low and even land, so that thereby you may know (when you saile alongst this coast) whether you be to the northwards or to the southwards of this black point. A little to the north- wards of this point lieth a high and great Iland a half league long, which the Ruffes call Noock Ostrove, which is the Nayle Iland, behind it is very good road, you must runne in there from the southwardes; from the northwardes you cannot come in there behind it.

The north end is fast to the maine land with a bancke or strake of sand, which lieth most part above water, you may saile in there so farre behind it, as you will, and ancker in ten, eight, fixe, or foure fathome, the further that you saile in the sholder it is, there it is verie good lying, and shel- tred for all windes.

From the Siornenos, or the black point to Evanekrist it is southsoutheast foure or five leagues, that is a point with many crosses, under it you may make good road for sou- therly windes.

From Evanekrist to Kletna are yet three or four leagues, this is a point, whereupon stand also many crosses it lieth out a little, but not so much as Evanekrist, there you may have also road for southerly windes, but not for sea- winds.

From this point to the Ilands of Swetenos or Iockena, it is two leagues, these are 6 in number, whereof the 5 ly a- longst the shoare about the space of two leagues, the sixth lieth within the other, thwart of the southermost of the five: The three northermost ly one by the other, as also two sou- thermost parted asunder from the other three, the norther- most of all these Ilands of Iockena lieth from the point of Swetenos due west three leagues, behind it is good road thwart of the south end in five or fixe fathome. The point of Swetenos is a flat point lying out, to the westwardes of it, at the end of these foresaid Ilands, goeth in the river of Ioc- kena, where is a great Sammon fishing. When you are by Swetenos you can see little perfectenes of these Ilands, be- cause the maine land is much higher then the Ilands.

He that commeth from the northwardes, and is bound into Iockena, must runne close alongst by the shoare, for to get sight of these Ilands. Through foure severall waies you may saile through these Ilands into the river of Iockena: First comming from the northwards, you may saile alongst by the shoare, through betwixt the shoare and the Ilands,

(which you leave then all on the larboard side) into the river.

The second passage lieth in through betwixt the three northermost, and two southermost Ilands, that is a broad, wide and deepe, and also the best channell of all, it lieth southwest, and southwest and by west from the point of Swetenos, and lieth in most south, when you saile in there, you must runne nearest the southermost Ilands, because of a suncken rock which lieth in this channell somewhat off from the third Iland, at high water you may runne over it, but not at low water.

Being come within these Ilands, you shall see the sixth Iland which lieth within the two southermost, you must run about by it, leaving it on the larboard side. When as you are then a little past that innermost Iland, you come against the high point, and saile in alongst amid the channell, be- twixt both lands, there it is shold water, to wit, five, four, three, to two fathome and a half, but you may saile in amid the channell without feare, all alongst unto the Lappish houses, where the Sammon fishing is, and ancker there also in the middelt of the river, there abouts ly some suncken rockes, which at low water are uncovered, whereof you must take heed.

For to have the right knowledge of this channell, you must looke out for the high point, which lieth at the west point of the river, within the Ilands, when that is behind the south Iland (to reckon off from the northwards) and the point of Swetenos is northeast and northeast and by east from you, then you are right open before that foresaid channell.

Betwixt the two southermost Ilands goeth also an indiffe- rent wide channell through, where men can saile in, and so come on against the innermost Iland, which you may saile about on both sides.

Betwixt the Ilands and the maine land, you may also saile through, but that is a verie narrow channell, men saile through it, as if they sailed in alongst a ditch, betwixt two Dykes.

For need, or if it were in extremity, you might also saile through at high water betwixt the northermost Iland, and the second, and likewise also betwixt the second and the third but if you can by any meanes doe better, it is not good to doe it.

Men may ancker at divers places within these Ilands. Be- twixt the two southermost Ilands and the innermost Iland, you may have road, where you may lie sheltered for all winds, and safe from Ice-drifts out of the sea. Within the innermost Iland you may also ancker over against it some- what further in against the steepe point. At the rivers mouth, on the west shoare is a bay where you may saile in, & ancker so neere to the shoare as you will, in 6, 5, 4, & 3 fa- thome soft sticking ground, there you ly safe from all Ice- drifts. You may also ancker on the east side, right before the steepe point, but there you ly not safe for Ice that commeth out of the river. The tyde here amongst these Ilands, agreeth neare with the tyde of Swetenos, it floweth there the Spring tydes, neare two fathome and a halfe up and downe.

Behind the point of Swetenos you may runne into the bay, and ancker there for a north, northeast and east wind, there is cleane ground.

How these lands doe shew themselves at sea.



Thus sheweth the land betwixt Swetenos and Orlogenes, as you saile alongst by it.

C H A P. V.

The description of the coast from Swetenos to the crosse Iland.

Lombascho



Rom Swetenos to Lombascho, the coast lieth southsoutheast thirteen leagues. Vnder Lombascho men may also goe to ancker, but it is not there very good lying, especially with great shippes, the ground there is not cleane, and when the wind is out of the sea, the sea commeth in there rowling verie much. The lying of this Road standeth drawne out at large in the Carde, with the depths set downe as it is at high water and neepe tydes: the water falleth and floweth there at least two fathome up and downe, and at Spring tydes little lesse then three fathome, or two fathome and an halfe.

Within the point, or in the bight of Lombascho you may not ancker, there remaineth not above three foot water, & the ground is stonie and fowle.

To the northwardes of Lombascho lie five Ilands lying alongst the coast almost halfe waies to Swetenos.

Orlogenes.

Three leagues to the southwardes of Lombascho lieth a black steepe point, untill there, the coast lieth off from Lombascho also southsoutheast, but from that point to Orlogenes the course is south nine leagues, betwixt them there is no place where men may ancker, but all alongst a whole coast, cleane and steepe.

Stoneriffe.

From the point of Orlogenes lieth off a stoneriffe a shot of a cast peece into sea, which falleth dry a great waies at low water, whereof men must take verie good heed.

Three Ilands.

From Orlogenes to the river Ponnoye it is five leagues: betwixt them ly the three Ilands. First from Orlogenes to the two first Ilands, the course is south three leagues, and from thence to Ponnoye southwest and by south three leagues.

A halfe league to the northwardes of Ponnoye lieth the third of the three Ilands, so that the two and the third lie about two leagues asunder.

These Ilands are much lower then the maine land, so that they can hardly be seene or not at all, except you be by the shoare, thwart of them you may come neere the shoare in seven fathome without danger.

Thwart of these three Ilands, and Ponnoy, the mouth of the white sea is at the narrowest.

About four leagues thwart off to seawards from the three Ilands, in the midst of the mouth, lieth a shold, which is verie uneven and stonie, & at some places with low water,

commeth dry above water, it lieth south and north, first north alongst the coast, at last northnorthwest untill thwart of Lombascho, but there alongst it is deepe enough, fifteen and sixteen fathom. About southeast from Ponnoy it is at the sholdest seven fathome deepe. You may also saile alongst to the eastwards of this shold into the white sea, but there it is shold water, uneven and verie shold. The right fareway is alongst to the westwardes of it, five and twentie fathome deepe.

Ponnoy is a river where remaineth at low water no more then tenne foot water, it floweth there with a spring tyde three fathome up and downe: and with an ordinarie tyde fiftene foot.

From the three Ilands to the Iland Soufnowits, which men doe call the crosse Iland the course is southwest and by south, or as some doe hold southwest tenne leagues, or from Ponnoy nine leagues. All alongst this coast men may ancker everie where in eight and nine fathome, and with contrarie windes stop the tydes, there goe strong tydes (especially in the spring) of the yeare with an ebbe.

Betweene the three Ilands and the Crosse Iland lieth a point upon which stand also three crosses, one by the other, which men doe mistake oftentimes for the Crosse Iland, but it is much smaller to see to. When you doe get sight of that point, there sheweth by it, as if there lay a ship before the land with the topmasts stricken. The right Crosse Iland hath upon the north end two crosses, and upon the south end three, by all these marks they are good to be knowne one from the other.

Behind the Crosse Iland you may have road in fixe or seven fathome, you may sail in behind it as well from the northwardes as from the southwardes, it is there cleane and cleare everie where, men doe ancker, that the great crosse doe stand from them eastnortheast, there is the right road.

Southeast and by south from the three Ilands, and Ponnoy on the Russe side, there goeth in the Meseens golfe, into which commeth a great River where men may goe up to Kida, and Kolmogro, and also another upon which the towne Slowoda lieth.

Southeast from Ponnoy lieth a little Iland in the mouth of the Meseens golfe, where you may have road under for westerly and southwest winds.

The south point of this golfe is a low sandstrand, all growne with trees, there you may also ancker alongst by the shoare, but close by the land; if you lie somewhat off from the shoare in nine fathome, there the ground is fowle, from thence alongst the shoare to the Blew point, it is all a faire strand.

Spanische mijlen 17½ in een Graadt.
Engels, en Fr. mijlen 20 in een Graadt.

L. Souffrowits of
Gruys Eilandt

LAPLANDT

LOMBASCHO
naet leven ontworpen.

R. Puck
De drie eylanden

C. Orlogens

Lombascho

Al Eyslanden

Kombascho

Lockena

Sueterloes

C. Ponters

C. Bona
Fortuna

Mezeensche
Golfe

C. Bargo

Pascaarte van
de Mont van de
Witte Zee.

RVSSEN

Colcova

Carana

A description of the Coasts and havens on the south side of the White sea.

Currents in
the mouth
of the White
sea.



The course is southwest twentie leagues from the Crosse Iland to the blew or gray point. In this farewaie in the mouth of the White sea, there goe sometimes very strong currents, especially in the Spring, through the terrible great freshets, of the melting of the snow, which falleth from both sides into the White sea, and runneth through this Strait into the sea, with great whitling and terrible ripplings: It happeneth sometimes that the current runneth there so terrible strong, to the westwardes into the sea, that with a reasonable gale and full sailes, men can doe no more but stemme the tyde, whereof men must be mindefull.

Gray point. Vnder the gray point men may ancker on the south side, in tenne, eight, or seven fathome, there it is good lying for easterly windes, a northeast wind commeth from the point, the ground is there reasonable good, but not the cleaneft.

From the gray point eastwards to the Meseens Golfe the coast is all faire sand strand, with some bancks of two fathome and a halfe, and three fathome alongst the shoare, not farre without the land, where sometimes the current falleth over with great riplings.

From the blew point to the River of Archangell the course is south and by west thirteene leagues. When as you saile to towards the River, you shall then first espie the land a good waies to the westwardes of S. Nicholas, it arriseth in a long strake, and then there riseth more land towardes the River, as if it were a round Iland, afterwardes you shall see the steeple of S. Nicholas, when that standeth south and by west, and southsouthwest from you then you are open before the mouth of the river of Archangell.

For to saile
into the ri-
ver of
Archangel.

If you will saile in there, then bring the steeple of S. Nicholas a shippes length and a halfe, or two shippes lengths to the eastwards of the Crosse sandhill, keepe them so standing, and saile in right with them, untill that the wood within, come midwaies in the middlemost Podesfemske, goe on then southwest and by south, and southwest, for to saile a weather of the taile or showld, which shooteth off from the east shoare, when as then the wood within, (that is, the wood upon the northeast point of the River) commeth to the southermost of the two woods, which stand upon the middlemost Iland of the Podesfemske, then you are in the mouth of the channell, right upon the showld of the barre, the markes of the east taile are, when the wood commeth halfe waies betwixt the southermost and the middlemost Podesfemske: when the point of the southermost Podesfemske is southsoutheast somewhat southerly from you, then you are without the point of the west grounds. If you bring that point not more easterly from you, you can take no hurt of that point. When you are entred the channell, then goe as is before said, southwest and by south and southwest, untill that the steeple of S. Nicholas come a shippes length by west the Crosse sandhill, then further take the sounding of the west shoare, and runne in by it, towards the foot strand, and alongst close by it, without going off from it, untill that you come thwart of the white place, or spot, on the west shoare, about the place where it standeth marked in the carde with A. Edge over then from thence east & by south, and eastsoutheast right to the point of the Wood on the east shoare, and on southeast in alongst by the east land, close

alongst by the shoare, but thwart of the two Ilands which ly on the starboard side, it is a good waies alongst the east shoare somewhat foule and showld, whereof you must take heed: but goe all alongst by the east shoare, untill that you come by the first River on the larboard side, edge then over againe to the west shoare alongst southsouthwest, untill you come to the bight, there it is showld water on the east side.

When you are come in the bight, then goe on eastsoutheast, and afterwards east and by south towards the Stonereach, saile through there amidst the channell, alongst by the buys, which ly in the midst of the deepe, it is on both sides of the buys uneven and rugged.

When as you come against the Stonereach there standeth a Fishers house upon the west shoare, by the little River that runneth into the land, at the north end, or west end of the Stonereach, thwart of that foresaid house lieth a great Stone under water, which you may sail about on both sides, it lieth about the midst of the farewaie, as you come sayling on, men saile commonly about to the westwardes of it, all alongst by the west shoare, like as also through the Stonereach, for the west side is deep enough, and at some places somewhat softe ground, but the east shoare is full of rocks. When as you are past the buys, then you must keepe off againe, somewhat from the shoare. There was wont to ly a little Iland at the end of the Stonereach, but that is of late yeeres altogether skowred away with the Ice. When as you are now through the Stonereach, the course is first southeast, and afterwards southeast and by south, untill you come into the Bight, then goe on eastsoutheast, and keepe yet to the west shoare, untill that you see the town of Archangell, then saile right towards it, but avoid the point on the larboard side, for it is foule.

For to goe from Archangell further up the River to Kolmogro it is about twelve or thirteen leagues, most southeast, but the River runneth upwards with many crooked Bights.

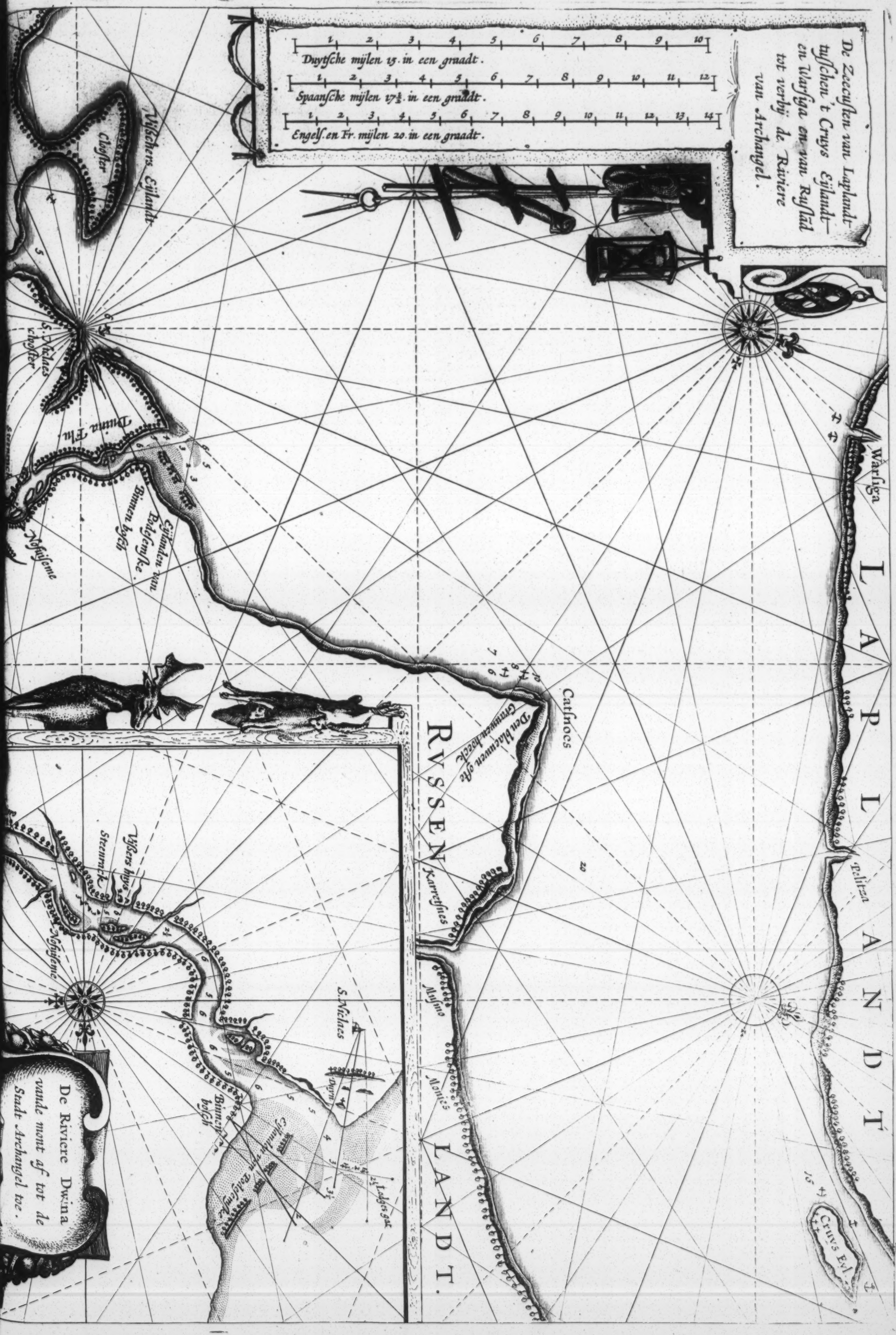
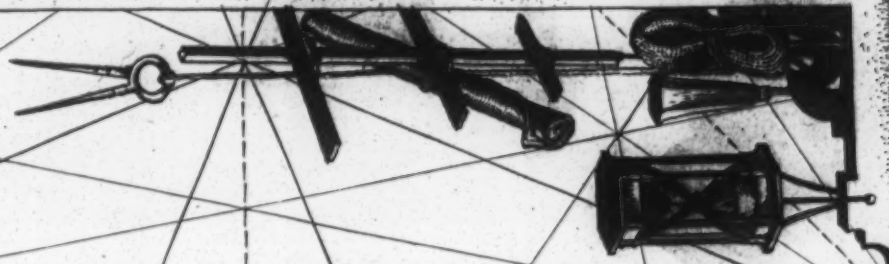
For to saile out of the River of Archangell, then run out by the footstrand, & keepe the founding of the west shoare. When as you beginne to see the steeple of S. Nicholas, then bring it a shippes length to the second or middlemost Podesfemske, there lieth a black hommock upon the strand. The north side of the wood within, commeth then over that hommock, then goe on northeast and by north, and north-northeast, towards the Podesfemskes. When as then the wood within, commeth to the north side of the southermost of the two woods, upon the middlemost Podesfemske, then you are upon the showld of the Barre, but when the point of the southermost Podesfemske is southsoutheast somewhat southerly from you, then you are at the end of all the showldes, and may goe your course through the sea, where you please, no showldes shall hinder you.

From the Barre of Podesfemske, or from the River of Archangell to the road of S. Nicholas it is four leagues. There standeth a beacon at the end of the Iland, where the English house standeth upon, by west that beakon is the road for the English shippes, in six or seven fathome, according as they ly neare or far from the shoare. The English River lieth in there eastnortheast, and northeast & by east, alongst by the Cloyster of S. Nicholas, but that is so showld a river that no ships can goe into it, men must lade them without with Lodges.

About southwest and southwest and by west from the barre of the river of Archangell lieth the Salte Iland, upon it standeth a Cloister, & is fast to the maine land. The land lieth off from thence to the Cap de Onega, w. & by n.

De Zeeuyſten van Lapland
 tuſſchen t' Cruys Eijlandt
 en Warſiga en van Ruſſiël
 tot verby de Riviere
 van Archangel.

Duytſche mijlen 15. in een graadt.
 Spaanſche mijlen 17½. in een graadt.
 Engelf. en Fr. mijlen 20. in een graadt.



De Riviere Dwina
 vande mont af tot de
 Stadt Archangel toe.

C H A P. VII.

The Lappish Coasts on the north side of the White sea, from the Crosse Island, untill past Ombay.



From the Crosse Island to Warfiga the course is westsouthwest, and west and by south about four and twenty leagues. Warfiga is a village, lying on a river, where is a Sammon Fishing, which lieth in to the northwards within the land, you cannot come into the River with shippes, there is no more then eight or nine foot water, but must stay without in the Road before the River, there is cleane sandground, without any foul ground, so that you may anker there without danger, so neare or farre from the shoare, as you will.

This River men doe knowe (when they saile alongst the coast) by three high hommocks, which are higher then all the other, & almost of fashion like the three hilles by Bayonne in Galicia, to the northwards of it are white sandhills with trees upon them. Even by west the three foresaid hommocks goeth in the river.

For to saile from Warfiga to Ombay the course is alongst by the coast a little west, west & by north, & then westnorthwest, afterwards the most northwest, unto the point of Tauria 36 or 37 leagues. About halfe waies betwixt them; well so neare Warfiga as Tauria lieth on the coast a high bare hill, thwart of it and to the westwards of it ly some bancks, whereof you must take heed.

The point of Tauria is a high steepe point full of trees, to the eastwards of this point the land falleth away into a great bay farre alongst to the eastwards. About five leagues to the eastwards of the point of Touria, lieth a rock, a good waies from land, which is not very great, but very good to be knowne, it sheweth a farre off, as if there sate a great Ape upon it, this rock the Russes call Tourie Babbe, that is to say, Grandmother of the point.

Within that rock in that foresaid bay it is all shold water, uneven and foule ground, where you may not anker nor have road, but to the eastwards of the point Tauria you may anker for westerly and northerly winds, somewhat to the northwards of the point in the Bight, there it is shold, but by the point it is deepe, there you must anker close by the land.

By west the point lieth the Island Volna Ostrove, by the Dutch men called the Reeme Island. From the point Tauria to that Island the course is northnorthwest two leagues.

Betwixt that Island and the land of Tauria lieth also a little Island, betwixt these two Islands you may (for need) saile through with a shippe, but it is very narrowe, at the northeast point of Ostrove is road in thirty fathom, then you ly with the shippe, (when shee lieth wended to the Island) in eight fathom, so very steepe and rising is the ground there.

From Volna Ostrove, or the Reeme Island, to the Gouba (that is the Salt River where men doe lade, lying a halfe league by east Ombay) the course is northnortheast three leagues, which lieth in north, and north and by east, it is not very broad, but deepe, at the coming in it is in the midst four and twenty and five and twenty fathome, farre within, five or six fathome deepe, but there it is foule. Men doe commonlie anker a halfe league within the river, on the east side, with an anker in the midst of the river, in fixeene or eightene fathome, and with a cable on land, there it is good lying with all windes, except with a southsouthwest wind, which bloweth there open in.

About a halfe league to the westwards of it lieth the fresh River of Ombay, which is so shold & foule, that men can not goe in there with shippes, except they be small, and also the Russes are not willing they shold come there, for not to spoile their Sammon fishing, there is great stoare of Sammon caught, which is carried from thence with boats, to the ships in the Salt river.

From thence the coast lieth somewhat alongst westsouthwest, and then up northwest to Kandalex.

Thereabouts ly also more ladeplaces, where Sammon is Kierick caught, as Kierickarick, and Kargapoll, that lieth southwest from Ombay, on the Koreels side.

Kargapol.

C H A P. VIII.

The Coast of Rusland from the Cape Candenoës eastwards to Nova Zembla.



The Cape Candenoës and Orlogenoës Candenoës. ly northeast and southwest seven and forty leagues asunder. The point of Candenoës is very good to be knowne, there stand five great crosses upon it for markes. When as you fall with it, you may very well perceive, that the land falleth away, on the one side to the southwest, towards the White sea, and southeast on the other side.

About thirteene leagues to the eastwards of the Cape de Candenoës lieth an Island called Morsonowits, to the eastwards of it goeth a great Bay into the land, but it is very shold water, with many sholdes and Dwalegrounds. It hath heretofore happened, that some ships have beene here lost, thinking that they runne into the mouth of the White sea, for it agreeth very neare with the course and also with the height of the White sea, but it is good to know by the land, & to discern one from the other, for the Russe coast to the eastwards of Candenoës is altogether a land with Sandhills, and a flat strand, but the Coast of Lapland is high and hilly. In this Bay goeth a River through the land, where you can come through with Lodges into the White sea.

Thwart of this Bay, about six and twenty leagues east, & east and by south from Candenoës lieth the Island of Calgoya, being thirteene leagues long; you may saile round about it, but upon the south side runneth a great riffe alongst the land: they that come from the eastwards must avoid it, for it is fast to the west end of the Island. Upon this Island are great store of Geese, which in the Sommer are altogether bare, or naked, without any feathers, which sit and brood upon one egge, which they have lying under them, and so doe hatch their young one, which are there in such abundance, that the Russes doe come there a shoare with their Lodges, and lay a deale or board upon the land, and drive the Geese with staves, into their boats or Lodges, in such abundance, that they salt them into Barrels, in great abundance.

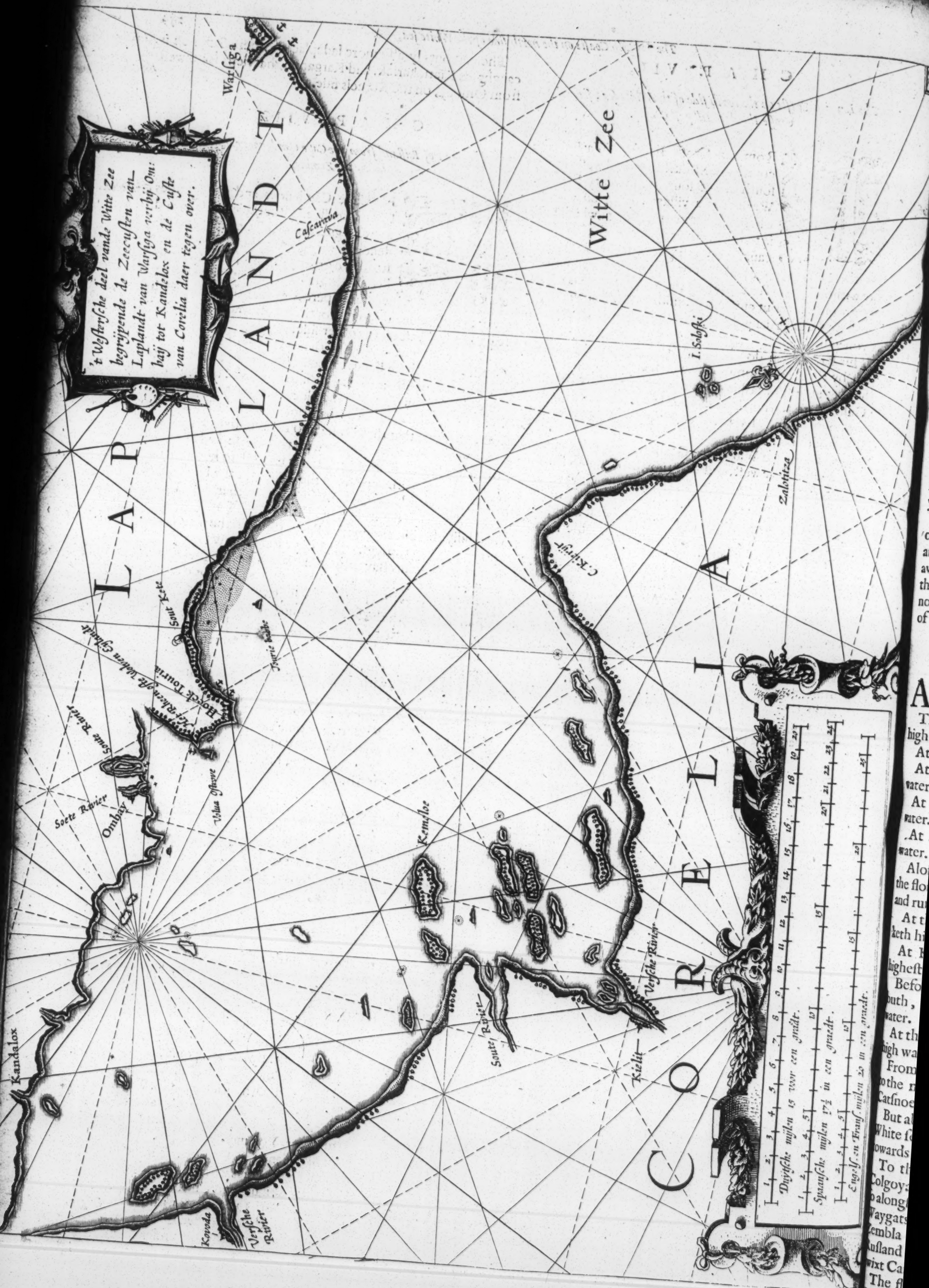
From Candenoës to the Island Tuffara it is eastsoutheast two and forty leagues: betwixt them both goeth in the foresaid Bay. By west Tuffara lieth the point of Swelgenoes.

From Tuffara to the River of Colcova the course is east seven leagues, which is a good river, being twelve foot deep, but there is no other trade, but that the Russes doe come there from Colmogro and S. Nicholas with Lodges, for to trade there, and to barter their wares there for Skinnies & other wares.

Seven leagues to the eastwards of the River of Colcova lieth the River of Pitfana, there is but fixe foot water, and is an unknowne place, but a little to the westwards of it, lieth a shold, which you must avoid: Oliver Brunell in his voyage from Nova Zembla came on ground there.

About 13 leagues to the eastwards of Pitfana lieth the river of Pitfara, which lieth in s.s.e. by the east point, & hath 12 foot water, the land is there low with Sandhills, & upon the west side standeth a Packhouse, with some crosses. When you come within the River, you must edge up westwards towards the Packhouse, & anker there in 3 & 4 fathom, there is a great Haff, or broad water. You must avoid the east side of the River, which is full of sands and bancks. The little towne of Pitfara lieth about 35 leagues within the land, there is great abundance of costly Skinnies and Christal.

Betwixt Pitfara & Waygats lieth Oltgyn, & without the land ly two rocks or little Islands, the one called Oraengien, & the other Grave Maurice, you may anker under them in fixe or seven fathome. From the fourthermost shooteth off a little riffe, but you may sound it well in three fathome.



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To the eastwards and to the westwards of these two little Islands is a great Bay, where it is shewld water, the land runneth there round to the point of Pitfora, all alongst in a Bay off from Pitfora unto the Waygats. It is from Pitfora to Waygats northeast and by east, two and thirty leagues.

Waygats, which is also called the Strait of Nassowé, is a Strait where men may saile through into the Tartarish sea, it lieth in first about east, afterwards northeast through about eight or nine leagues, about halfe waies through lieth an Island, which you may saile about on both sides. A little within the point, on the north side is a faire Bay, which you may saile into so deepe as you will, in five, foure and three fathome, good sticking ground, alongst by the east shoare is the deepest water, there you shall ly sheltered for all winds and Ifedrifts.

Through this narrowe or Strait, hath been divers times attempted, or undertaken, for to discover, and to find a waie, for to passe alongst to the northwards of Tartaria, unto the rich Kingdomes of Cathay and China, and so forth to the Molucques, but in vaine, because of the terrible Ice that remaineth there the whole yeare through, and can never melt, by reason of the continuall cold.

From the east end of the Strait Waygats to the Bay of Oby it is eastsoutheast, and southeast and by east forty leagues. To the eastwards of it that land lieth forth northeast fortie leagues more, to the two norther Rivers, and then yet so forth alongst northeast, but how far is yet unknowen.

The West coast of Nova Zembla lieth to the northwards off from Waygats to Costintfack northwest about three and fiftie leagues. To the northwards of it the land falleth away, about north and by east to the point of Langenes, or the States point, further northnortheast, northeast, & east-northeast to the Islands of Oraengien, the northermost part of Nova Zembla, in the height of 77 degrees and an half.

Of the tides and course of the streames.

AT the North Cape a southwest Moone maketh high water.

Thwart of the Tannebay a southwest Moone maketh high water.

At Wardhouse a southwest Moone maketh high water.

At Kilduyn an eastsoutheast Moone maketh the highest water.

At the Seven Islands a southeast Moone maketh high water.

At Swetenoes a south and north Moone maketh high water.

Alongst this coast to the eastwards of the North Cape the floods come out of the northwest and northnorthwest, and run so alongst the coasts of Lapland, unto Orlogonose.

At the three Islands a southwest and northeast Moone maketh high water.

At Katfnoes point an east and west Moone maketh the highest water.

Before Podessemske and S. Nicholas an east and by south, and west and by north Moone maketh the highest water.

At the Island of Nova Zembla a southeast Moone maketh high water.

From Orlogenes and the three Islands the flood falleth into the mouth of the White sea, towards the gray point of Catfnoes about southsouthwest and southwest and by west.

But about the point of Catfnoes the flood falleth into the White sea, partly towards Warfiga and Ombay, and also towards the Podessemske and S. Nicholas.

To the eastwards of Candenoës, towards the Island of Colgoya, the flood falleth east, and east and by south, as also alongst the same Island, and from Colgoya towards the Waygats the tyde falleth east and west. Alongst Nova Zembla the tydes turne about with the Moone, alongst Rusland they come out of the west and westnorthwest, betwixt Candenoës and Pitfora, and fall so alongst Rusland.

The floods towards Waygats come from Colgoya and Nova Zembla, and fall together east and by north through

the Strait of Waygats towards the River of Oby, so that the ebbes and floods doe keepe open the channells of Waygats, that they are oftentimes without Ice, or at least but with Ice that drives in Schooles.

But to the eastwards of the Waygats the floods come out of the northeast, and fall so into the Oby, and into the Strait of Nassowé, there the water riseth and falleth, but keepeth no certaine tyde.

Of the depths and grounds both to the eastwards and westwards of Waygats.

AL the coast alongst off from Candenoës unto Waygats, men doe find a flatte ryfing ground, the most part sand and softe ground, he that must saile there in misty weather, must knowe that in eight or nine fathome depth he is four or five leagues from the coast, but when it is 30, 35 or 40 fathome, then he is faire enough from the land. So it is also alongst Nova Zembla, and also over the east side of Waygats, but when you come before the Strait it will be shewlder by little and little.

How these lands doe lie one from the other, and from other lands.

From the North Cape to the North Kyne east and by south 13 leagues.
 From the North Kyne to the Tannebay e.s.e. 10 leagues.
 From the Tannebay or Matkorf to Wardhouse southeast & by east, southeast, and southeast and by south 16 leagues.
 From Wardhouse to the point of Kegor southeast, & southeast and by south 10 leagues.
 From Kegor to Laus southeast and by south easterly 9 or 10 leagues.
 From Laus to the River of Kool south & by east & southeast 10 leagues.
 From Laus to Kilduyn southeast and by south easterly 10 leagues.
 From Kilduyn to the point of Tierrebirry southeast and by east 5 leagues.
 From the point Tierrebirry to the Seven Islands southeast and by south 13 leagues.
 From Tierrebirry to Swetenoes the coast lieth southeast & by south. 40 leagues.
 From Swetenoes until three leaguespast Lombascho southeast 16 leagues.
 From thence to Orlogenoes south 9 leagues.
 From Orlogenoes to the three Islands south 3 leagues.
 From the three Islands to Ponnoy southwest and by south 3 leagues.
 From the three Islands to the Crosse Island Soufnowits southwest 20 leagues.
 From the Crosse Island to Catfnoes, or the gray point southwest 20 leagues.
 From the Gray point to the River of Archangell south and by west 13 leagues.
 From the Barre of Archangell to the salt Island southwest somewhat westerly 7 leagues.
 From the Salt Island to the C. Onega west, and west and by north 17 or 18 leagues.
 From the Cape Onega to the Islands Solofky northwest and by west 20 leagues.
 From the Crosse Island to Warfiga westsouthwest, and west and by south 24 leagues.
 From Warfiga unto the point of Touria west, west and by north, westnorthwest, and northwest 37 leagues.
 From the point of Tauria to Volna Ostrove northnorthwest 2 leagues.
 From Volna Ostrove to the Gouba to the eastwards of Ombay northnortheast 3 leagues.
 From Ombay to Kandalex northwest and by west 13 leagues.
 From Orlogenes to the C.de Candenoës the cours is northeast 47 leagues.
 From Candenoës to the Island Colgoy east and by south 26 leagues.

From

From Candenoest to Swelgenoes southeast and by east 29 leagues.

From Candenoest to the Iland Morfonowits southeast 13 leagues.

From Candenoest to Tuffara it is eastsoutheast 43 leagues.

From Tuffara to Colcova it is east 7 leagues.

From Colcova to Pitfana east and by north 7 leagues.

From Pitfana to Pitfara east and east and by north 13 leag.

From Pitfara to Waygats the course is about northeast and by east 14 or 16 leagues.

From Catfnoes to the Ilands of Solofky west or somewhat more southerly 37 leagues.

From Catfnoes to Warfiga northwest and by west 16 or 17 leagues.

From Catfnoes to Polongi northwest and by north 23 leag.

From the Ilands of Solofky to Ombay in Lapland north 32 or 33 leagues.

From Solofky to Warfiga eastnortheast 32 leagues.

From Solofky to Polongi northeast and by east 50 leagues.

From Candenoest to Costintfarck in Nova Zembla northeast and by east about 60 leagues.

From the east end of Colgoya to Waygats east 60 leagues.

From Pitfara to the east end of Colgoya westnorthwest 43 leagues.

Heights of these lands.

THe Iland Kilduyn lieth in 69 degrees and 40 minutes.
The point of Catfnoes or the Gray point lieth in 65 degrees.

S. Nicholas or the River of Archangell in 64 degr. 30 m.

The Ilands of Solofky in 65 degrees.

Ombay in 66 degrees 45 minutes.

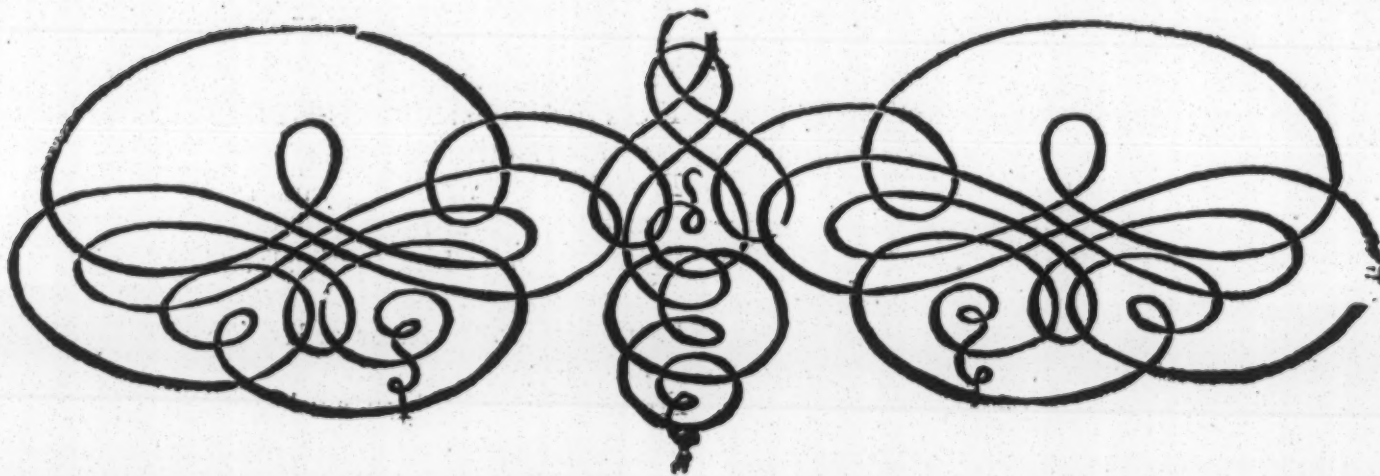
Cape Candenoest in 69 degrees 30 minutes.

The Iland Colgoya in 69 degrees 10 minutes.

The Rivers of Colcova, Pitfana, and Pitfara ly in 68 degrees 30 minutes.

Waygats or the Strait of Nassow lieth in 69 degr. 40 min.

The end of the sixth Booke.



THE
THIRD PART
of the
SEA-BEACON

Containing
A DESCRIPTION OF THE
Seacoasts of the Western
Navigation;

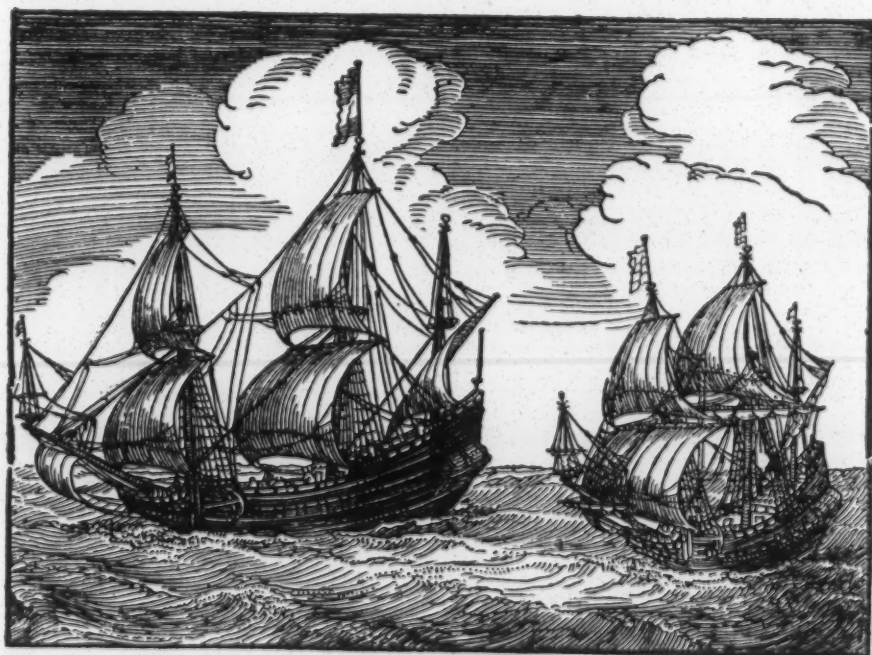
COLLECTED AND COMPILED TOGETHER
Out of the Discoveries of many Skilfull and expert Sea-men,

BY
WILLIAM IOHNSON BLAEV,

And Translated out of *Dutch* into *English*,
By RICHARD HYNMERS.

Newly corrected of many faults.

THE FIRST BOOKE
From the Tessel to Callice and Dover.



AMSTERDAM,

Printed by IOHN WILLIAMSON BLAEV, dwelling upon the Water, by
the Old Bridge, at the Signe of the Golden Sunne-Dyall.

CIO IO CXLIII

Cum Privilegio.

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THE FIRST BOOKE

of the

WESTERN

NAVIGATION.

Conteyning the Description of the Coast of Holland, and Flanders,
from the Tessel to Calice, and Dover.

CHAP. I.

Of the Tessel streame, and of the Channels of the Tessel.



Ow men shall saile from Amsterdam to Vrck (about Enchuyser sand) and from Enchuyfen to the Crippel and Creyl, is described in the first chapter of the first booke of the Easterne navigation.

From the buy upon the Crippel, (which lieth upon the East end of the Crippelsand in three fathome) unto the beacon upon Cripple sand the course is northwest and by west, and northwest. When Lutkebrooke, a small spire steeple commeth to Hem (which is also a spire steeple) then are you thwart of that beacon. From the beacon upon the Cripple, unto the souther buy upon Wieringer flat, the course is northwest and by west, or westnorthwest, according as the wind and tyde shall be, it lieth at high water with an ordinary tyde, in thirteen foot and a halfe, the markes thereof are these: Grootebrooke commeth betwixt two Haystacks, to the eastwards of the five water-mills which stand to the eastwards of Warvers hoof, that is along marke in the South. Twisch a sharpe steeple to the westwards of Medenblick, commeth over Almerdorp, there was wont to be a little flat steeple, but it is fallen downe, and therefore now not so good to be knowne, that was a right thwart marke. Vpon Wieringen standeth a cape, bring Eastlander steeple, which is a flat steeple upon Wieringen, right over the cape, & saile so right with it, and you shal come right with the buy. When you are at the buy, Westlander Church commeth then over Cleverstee, and the eight milles to the eastwardes of Medenblick, a little without the Bulwarke of the towne. For to finde the deepest of the Flat comming from the Cripple, you must be carefull to lok out for the foresaid markes. If that Twisch come first to Almerdorp, before Cleverstee come to Westlander Church, then you are to neere to Breesand, or the grounds on the starboard side, these are sure markes for to saile over the Flats, when there ly no buyes. Alongst to the eastwardes of the buy is the deepest water. If you wil ancker before the Wieringer Flat, then come no neerer the Flat then when Twisch commeth a little to the westwardes of Opperdoes, or halfe waies betwixt Opperdoes and Almerdorp.

For to saile from the foresaid souther buy over the Gammels tot Medenblick, you must bring the westermost water-mill of the eight (which stand to the eastwards of Medenblick) a capstone barres length without or to the eastwards of the Bulwark of the towne, and saile then boldly without feare right in with them, untill that you come into the road where the ships commonly ly, or els, if you desire to goe into the haven, then saile in right to the norther head, there is nothing that can hurt you. But if you must turne to windwards over the Gammels, and that your shippe draweth more then eleven foot water, then runne not further over to the westwards, then that the foresayd water-mill commeth almost within, or a handspikes length to the foresayd Bulwark, so that you may yet well see through betwixt them,

j Booke West. water

then cast about, and run over to the eastwards, so long until Grootebroeck come in the five water-milles, which stand to the eastwards of Warmershooft, or on to the eastwards of them, so you shall not doe amisse, for it is there broad, and wide.

If you desire to saile over the Gammels to Medenblick, when you come from the Flie, then bring the steeple of Opperdoes over the westermost water-mill of five which stand to the westwards of Medenblick, and runne in so right with them, until that the westermost water-mill of eight (to the eastwards of Medenblick) come to stand a capstone barres length without the Bulwark, as here before once already hath been sayd. Having these markes thus, and that it doe become darke, then goe on south, and south, and by east, according as the wind, and tyde shall be, and you shall not doe amisse, neither shall you misse the towne. In this foresaid faire way, there is no lesse depth then upon the Wieringer flat, and all soft ground.

When the steeple of Twisch is over the westermost water-mill except one of the five which stand to the westwards of Medenblick, and Grootebroeck, in the little village, to the eastwards of the five water-milles on the Easterdyke, then are you in thirteen foot from the northwest point of the Cripple, and past the tayle of the Cripple. Vpon these foresayd markes, and thirteen foot, lieth a buy with three legges, and on the foresayd west shoare ly three drif-beacons in twelve foot, and then commeth the westermost water-mill (of the eight which stand to the eastwards of Medenblick) about a handspikes length from the Bulwark of the towne. Then for to have the deepest water, and to goe sure, governe your selfe according to the foresayd markes, to wit, of Opperdoes steeple over the westermost water-mill of them which stand to the westwards of Medenblick, and so you shall not have lesse water then upon the Wieringer Flat.

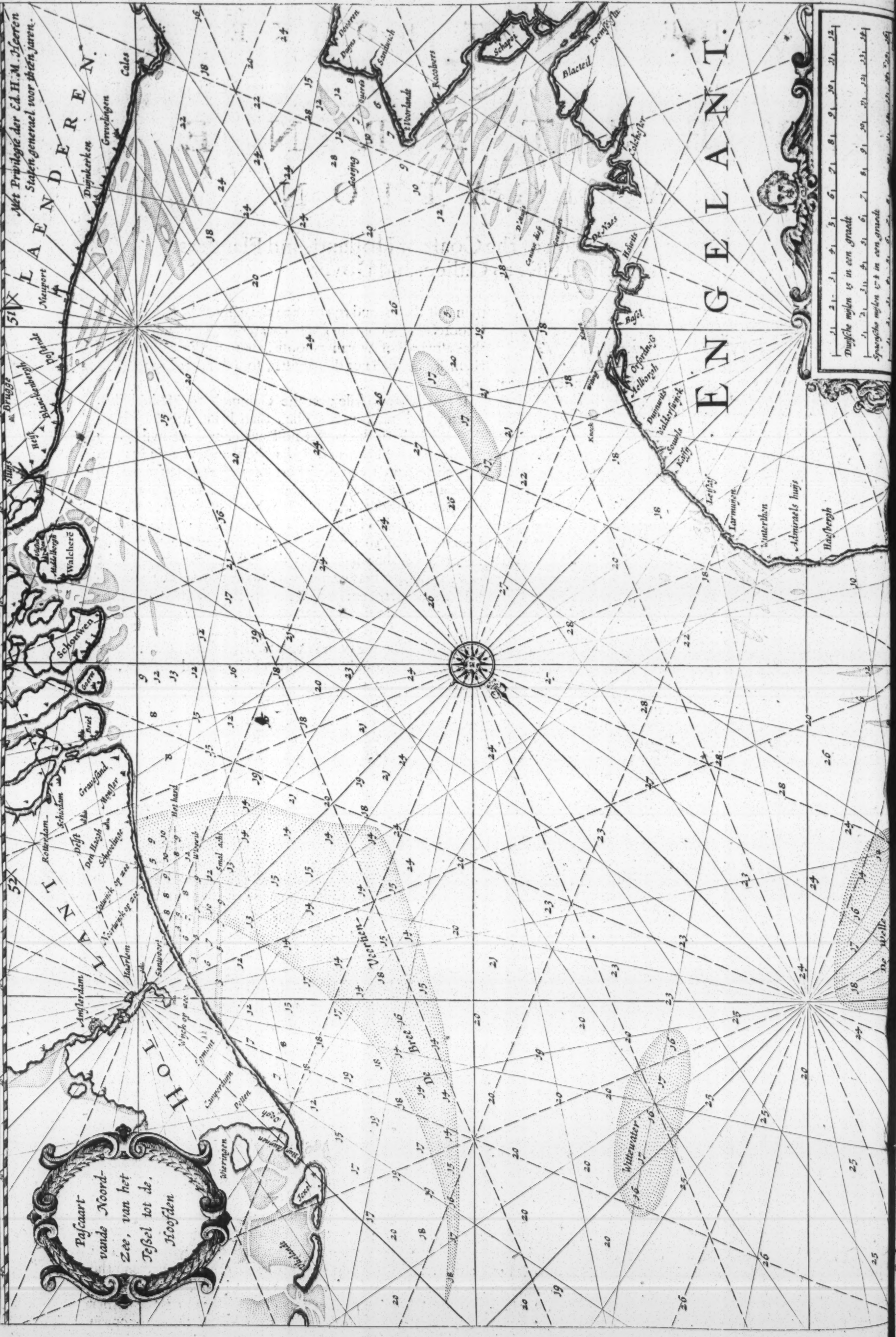
From the Souther buy to the second or middle buy, the course is northwest, and northwest and by north: but for to find the deepest water, go first northwest so long until that Ypelshoofs Church come over the water-mill which is called the Bolmill, and then forth northwest and by north. When the Cornmill upon Wieringen commeth in the swamp of the Oever, then you have the length of the second buy, which lieth upon the west, or the south end of a little plate called the Repell, the fareway is alongst to the westwards of it, there being at lowe water two fathom large, and at high water scarce three fathom deepe. On the west side of the fareway, betwixt the souther buy, and the middle buy, neere the middle buy, lieth a hard sand, called the Sow, or the old Sow, which on the east side is very steepe and needle to, which (in sayling up) men might sayle within a point or tayle of it: to the westwards of it shooteth off another taile to the northwards, a great wayes towards the northeast buy. Vpon the outermost, or northermost point, called Seughoort, standeth alwayes a beacon. Vpon Wieringer upon the Oever stand two little capes with barrells on them, the one upon the northend of the Oever, and the other upon the head, they are so little, that you can hardly see them: when you come off from the Souther buy towards the middle buy, then keepe them not one in

*For to saile
over the
Wieringer
Flat.*

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the

Met Privilegie der Ed. H. M. Heeren
Staten generael voor drie jaaren.



1	2	3	4	5	6	7	8	9	10	11	12
Duyfche mijlen 15 in een graad											
1	2	3	4	5	6	7	8	9	10	11	12
Spanghe mijlen 17 1/2 in een graad											

the other, for if you keepe them one in the other, then you will be very close to the south shoare, and shall but even run cleare of the old Sow, but keepe the southermost a little to the westwards of the northermost, and then you shall runne alongst the right fareway, and shall not take any hurt of the old Sow. When you come neere the middle buy, you must leave these markes, and use them then no longer.

From the middle buy unto the norther buy, the course is northnorthwest; when you come thwart of the norther buy then commeth Oostlander Church and the Cornmill, both over a little chappell covered with red tyles, that standes upon the Oever, thwart of it also standeth the foresayd beacon upon Seughoort. By the norther buy it is scarce three fathom deepe at high water, the fareway is alongst to the westwards of it. When you come by the norther buy, keepe still the foresayd northnorthwest course, untill that Oostlander Church come to the northwards of the Sedge-dyke of the Oever, & then you are past the little plate which lieth by the norther buy.

When as that Oostlander Church commeth from the Sedge-dyke, goe then north, and north and by east on, to the Nesse. In that fareway it is broad and wide, the west shoare all alongst unto the Nesse, is very flat, there you cannot take any hurt, but may boldly runne alongst by it, although it weare a lee shoare, but the east shoare is steepe, especially some what further out towards Iaepvaer. When the great cape upon Wieringen standeth a great shippes length to the eastwards of the houses upon the Oever, then you are well to way, and right in the fareway, betwixt the norther buy and the Nesse. When Ypels-hoof and Stru are one in the other, there is the road, where men doe lade and unlade, you may ancker there abouts in the in middest of the fareway in four fathom, the neerer the east shoare the deeper. Iaepvaer is a taile of sand or plate fast to the east shoare, which you might faile within when you faile off, but specially in sayling upwards in 6 or 7 fathom, upon it lieth a black buy. Vpon the point of the Nesse over against Iaepvaer lyeth a white buy, these ly both in three fathom, or three fathom and a halfe. In the winter, when the buys are taken away, then in place of the white buy there is set a beacon upon the Nesse. From the Nesse to Vogelsand, the course is most northwest, therefore when you have gotten the length of the buy or the beacon upon the Nesse, goe then more westerly, northnorthwest, and northwest and by north, and northwest, unto the beacon upon Vogelsand, the west shoare you may found in six and seven fathom. The markes of this reach are these, the mill of Oosterend (which is a little village upon the east end of Tessel) and the cape which standeth upon the dyke, one in the other, then are you amidst the channell in the deep, that is, 10, 11, and 12 fathom: when the mill standeth somewhat to the southwards, or to the westwards of the cape, then you are by the south shoare, which is very steepe, which (in turning to windwards) you may not come nearer then in 8 or 9 fathom, but being past Vogelsand, it groweth showlder, and the east shoare very steepe. As soone as you find that it beginneth to showld, you must cast about, els you should presently be on against the east shoare.

From the beacon upon Vogelsand, the course is west-northwest unto the buy upon Burgsand, which lieth upon the taile of the Schare, the marks of it are: the Eyerland even unto the east point of the Island Tessel, and the Church of Horne upon Tessel to Zuydhaffell, which is a few houses to the northwards of the Schonke. Or els when you come about Vogelsand, then keepe the foresaid cape and mill one in the other, untill that the foresayd Hoorn come to, or through Zuydhaffell, and then run on, keeping them so; when that Eyerland then commeth even to the east point of Tessel, then you have the length of the buy upon the Burgsand, you may bring the Hoorn well somewhat to the northwards of Zuydhaffell, but in no wise to the southwards of it, for els you should faile on against the south shoare. For to faile from thence to Copevaerders road, you must keep the Hoorn to Zuydhaffell, and faile forth keeping them so, untill you come against Tessel in the road,

& ancker there where you think good. Before Oosterend it is best for smal ships, there it is showld water, and there goeth little tyde, but most shippes doe ancker before the Geest.

Vpon the point of the Bos lieth a white buy in 3 fathom on the west point of the Balgh, which you must leave on the starboard side, and run about to the eastwards of it into the Balgh, and then forth alongst by the beacons to Wieringen you must leave all the beacons also on the starboard side.

For to faile from the Copevaerders road out at the Tessel, you must goe first southwest or somewhat westerly to the Helder, or runne alongst by the Tessel side in 9 or 10 fathom, untill you come neare the Helder, and then go out west close alongst by the shoare of the Helder, and by little and little somewhat more northerly, untill that the capes upon Huyfdowne be one in the other, or that the greatest come through the smallest, to wit, to the westwards of it, & then goe out northnorthwest or more northerly or westerly, according as the wind or tyde shall be, untill you come against the north shoare in 5 or 6 fathom, and run boldly out alongst by it, untill you be cleare out at sea.

When the tower of Westeynd (which men doe name the Westen, or the Wambus) commeth to be eastnortheast from you, or a little more easterly, then you have the length of Cape & steeples buy, that is, the innermost buy of the Spaniards channell, which you shall espy on the larboard side. To the northward of it ly three other buys, all along the east side of the Keyfers-plate, neare upon one course, (to wit, northnorthwest or a little more northerly) which you must leave (in failing out) all on the larboard side. The outermost buy lieth from the fourth, north somewhat easterly upon the point of the Keyfers-plate, in two and twenty foot at lowe water, you may runne alongst to the westwards of it, but not farre, for the Keyfers-plate is on the east side unto the outermost end very steepe, but the east shoare of the deepe is flat. When you come thwart of the foresaid outermost buy, then lieth the Kooger Church right eastnortheast from you, and the capes upon Huyfdowne are one in the other.

For to find the Spaniards channell comming from the northwards, you must bring the capes upon Huyfdowne one in the other, or a little through one another, to wit, the Runner that is the southermost and greatest, a little to the eastwards of the other, then they shall stand southsoutheast from you, faile then right in with them, keeping them so, & you shall faile right upon the outermost buy, or in sight of it, which lieth (as is said) upon the point of the Keyfers-plate in 22 foot at lowe water: when you come to the buy, the Kooger church shall ly due eastnortheast from you. Therefore if you come from the westwards or the southwards, then bring that church not more northerly then eastnortheast but rather a little more easterly from you, and faile then right in with it, untill that the capes come one right against another, or else you should lightly faile upon the Keyfers-plate, which is without upon the north side very steep. Men may run alongst to the westwards of the outermost buy, but not farre: alongst to the eastwards of it, it is broader and wider. From the first or the outermost buy, to the second, the course is south somewhat westerly, and from thence to the third, fourth, & fifth, which is the buy of Cape & steeple, it is almost one course southsoutheast, or somewhat southerly, the buys ly all on the west shoare, men may for need faile alongst to the westward of them, but not farre, for the west shoare is so steepe, that if a great ship should ly with the stearne against it, there should be a head no more then three foot by the maine mast at least three fathom deepe, but the east shoare is flat, men may run alongst by it upon their lead, untill they come within the buys. The buy upon the taile, that is, the innermost buy of the Slenk, lieth from the buy upon Cape and steeple, south and by west, & southsouthwest, but the Helder southeast. Men may faile from the buy upon Cape and steeple, right with the Helder, without danger, or to the buy upon the taile, & from thence alongst by the south shoare, which is also very steepe, or right to the Helder, according as shall be best convenient for

The Bos.

For to faile out at Tessel.

For to faile in at the Spaniards channell.

The fallin of the tide.

*The falling
of the tide.*

for the wind and tide. The fore-flood falleth very strong over the south ground northnortheast to the Spaniards channell, untill halfe flood; and the fore-ebbe to the contrary southsoutheast, untill halfe ebbe. The Helder lieth from the buy upon the taile, eastsoutheast, and southeast and by east. When you are come neere the Helder, runne close alongst by it, for to avoyd a taile which shooteth off from Geest sand, which you might sail within when you come in out of the sea, there lieth a buy upon it, which you must leave on the larboard side. Being past the Helder, goe northeast, or somewhat more easterly, or alongst by the Tessel's side in eight or nine fathom, unto the Cope-vaerders road, the Wieringen side is steepe.

The Slenk

In the Slenk ly sixe buys, the innermost lieth upon the taile of the Keyfers-plaet, westnorthwest from the Helder. For to saile out at the Slenk, you must runne alongst to the southwards of it, and leave it on the starboard side, and goe out west, & west and by south, to the second and third buy, from the third to the fourth, and fifth westsouthwest, the sixth or outermost lieth a little more southerly.

For to find the Slenck comming in out of the sea, then bring the Cape upon the Iland Tessel, & the Westen, (that is the steeple of Westeynder Church, which men doe also name the Wambus) one in the other, then they shall stand a little more northerly then eastnortheast from you, saile in so right with them, and you shall runne in sight of the outermost buy, which lieth from the Kyckdowne westnorthwest, and west from the Helder. If you come from the Northwards or the westwards, and will go in at the Slenck. then bring the Kyckdowne eastsoutheast from you, or the great Cape upon Huyfdown in a little valley a little to the northwards of the Kyckdowne, to wit, betwixt the Kyckdowne and Cane Neles house, saile then so right in with them, until that the Cape upon Tessel and the Westen are one in the other, then you have the length of the outermost buy, and shall not misse to meet with it, which lieth in four fathom and a halfe at high water, and in a quarter lesse then four fathom at a lowe water. Keepe that Cape and steeple one in the other, and saile in so right with them all alongst untill past the third buy, which ly all, (like as also the fourth and fifth) in the midst of the fareway, but alongst to the southwards of them it is deepest, the south shoare is very steepe, so that having one cast four fathome and a halfe, the next cast you shall have but three fathome, but the west shoare is flat going up; The fourth buy lieth from the third eastnortheast, or somewhat more easterly: the fourth and fifth east and by north. The fifth and sixth east and by north, and eastnortheast. The second buy lieth at low water in twenty or one and twenty foot, upon the shouldest of the Slenck: the other buys ly in four fathom at lowe water, but the sixth, or innermost, in three fathom upon the point of the taile, which you may not saile about to the northwards of it, but must leave it on the Larboard side, in sailing in. But you must reckon your tydes well. The fore-flood falleth northnortheast, thwart over this channell, & the south grounds, untill halfe flood, and to the contrary the fore-ebbe southsoutheast untill halfe ebbe. Within the sixth buy it is broad & wide, and men saile in from thence right to the Helder eastsoutheast.

The Land-deepe.

For to saile out at the Land-deepe, then run alongst within a bowe shot of the foot strand of Huyfdown, and about by the heads, & you shall not misse the innermost buy, which lieth upon the shouldest, neere the west shoare in seventeen foot at high water, and thirteen foot at low water, that shouldest place is not above two shippes lengths broad, over it, and also within it, it is deepe enough. Thwart of that buy, shooteth off a little taile from the shoare towards the buy, therefore run close alongst by the buy, and leave it on the starboard side of you in sailing out. Besides that buy, there ly 3 other buys in the Land-deepe, which you must leave all lying to seawards of you, and run through betwixt them and the shoare, when you are come past the fourth buy, you shall be past all the showlds, and you may set your course that way that you desire to be.

For to find the Land-deep comming out of the sea from

the southwards, you must take the sounding of the shoare in four fathom and a halfe, and runne so alongst by the shoare, and you shall saile right with the outermost buy; and doing so, come no nearer the shoare, or els you should saile within the taile of Arrian Bergers Creek, which shooteth off to seawards from the shoare, to the southwards of the south sand-hill. Or els if you come out of the sea with an open wind then set, and keep the great Cape upon Huyfdowne, over Dirckooms sand-hill, (that is, a round sand-hill a little to the southwards of the Kyckdowne, but not so high) and saile so in right with it, you shall not misse to meet with the outermost buy, which lieth at low water in four fathom and a halfe nearest to the wester grounds, or to the souther hakes, leave it on the larboard side, and runne in alongst to the eastwards of it, through betwixt it and the shoare, it lieth most northeast, and northeast and by north in, you cannot lightly take hurt on neither, of both sides, if you doe but take heed to keepe you from the shoare. Thwart of the Kyckdowne, or comming to the southwards of it, you must edge a little off from the shoare, for to avoyd a shouldest which lieth thereabouts, somewhat off from the shoare. When you come to the second buy, then commeth the mill to the Northwards of the Kyckdown, and at the third, the mill and Cane Neles house come one in the other; which 2 buys ly both in 5 fathom at lowe water. From the third to the innermost buy, it is northeast and by east, runne close alongst to the eastwards of it, for to avoyd the foresayd little taylor of sand, which (thwart of it) lieth off from the shoare, and then forth within a bowe shot about by the heads, and so alongst by the strand of the Helder: for to saile up from the Helder towards the Wieringen flat, you must goe northeast, or somewhat more easterly, according as the wind and tide shall be; or else in eight or nine fathom alongst by the Tessel, untill that the Hoorn come to the Northwards of Zuydhaffel, but take heed of the Wieringen side, which is so steepe there, that you may have twelve or thirteene fathom at one cast, & should be a ground before you should be able to heave the lead againe.

When that the Hoorne commeth then to northwards of Zuydhaffel, then keep them so standing, and saile up so to the Vogelsand, when that the Eyerland commeth even without the east point of Tessel, then you have the length of the buy upon Burgsand, which lieth on the south shoare, upon a taile of sand, which men may saile within at five or sixe fathom. From that buy upon Burgsand, it is eastsoutheast to the Beacon upon Vogelsand, but saile upon the foresaid markes of the Hoorn and Zuydhaffel, so long untill that you have the Cape upon Tessel, and the mill of Oost-erend one in the other; then keepe them one in the other, leaving the first markes, and saile up so unto the buy or beacon upon the Nefse, & so you shall runne amidst the channell in the fareway, which is ten, eleven, & twelve fathom deepe. If you bring the mill a little to the westwards of the Cape, then you shall be close by the south shoare, which is so steepe, that you may not come nearer it, in turning to windwards, then in eight or nine fathom. Being come about the Nefse, then goe on south, and south and by west, towards the buy upon the flat.

*Of the tydes, and course of the streames about
these foresayd places.*

V Pon the Wieringer flat maketh full sea a southeast or northwest Moone.

Before Tessel, in Coopvaerders road, an eastsoutheast, & westnorthwest Moone.

Without the grounds or showlds of the Tessel, an east and west Moone maketh the highest water, and in the entering of the Tessel, an east and by south, and west and by north Moone: but the flood goeth a good while longer in. And likewise runneth the ebbe also longer out, then the lowest water. When the Moon is south, or somewhat more westerly, it beginneth apparently to flow without on the strand, and likewise upon the showlds.

The fore-flood, and the after-ebbe out of the Tessel, fall both

one with the other northnortheast thwart over the grounds and channels, and right out at the Spaniards channell, untill halfe flood: and to the contrary, the fore-ebbe, with the after-flood fall right in at the Spaniards channell southsouth-east over the south grounds, and thwart over the Slenck & the other channells, untill halfe ebbe. A little while before halfe flood, the flood beginneth to runne right in at the channell, and againe a little before halfe ebbe, the ebbe beginneth to set right out at the channell. Therefore he that wil saile into these channells, must reckon his tydes verie well, wherein consisteth verie much. Without before the channell in the sea, the tyde turneth about with the Sunne, so that when a shippe doth lie at an ancker without the channells, and hath neither good nor hurt of the waves of the sea, it should have but a little still water.

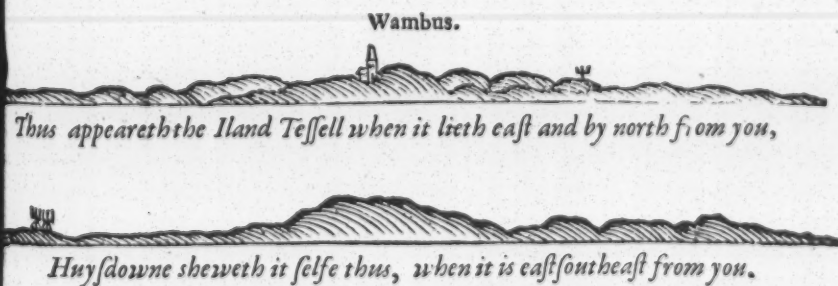
Courses and distances.

From Tēssell to the Maes, southsouthwest	24 leagues
From Tēssell to the Heads, or the Strait between Callis & Dover, s. w. somewhat southerly	53 leagues
From Tēssell or Marsdiep to Callis cliffe southwest and by south.	53 leagues
From Tēssell to the North Foreland southwest	48 leagues
From Tēssell to Orfordnesse westsouthwest	37 leagues
From Tēssell to Yarmouth west, and west and by south	33 leagues
From Tēssell to the Schield, or Crommer west	40 leagues
From Tēssell or Marsdiep to Flambrough head westnorthwest	60 leagues
From the Marsdiep to Lieth in Scotland northwest and by west somewhat northerlie	100 leagues
From the Marsdiep to Newcastle westnorthwest somewhat northerlie	83 leagues
From Tēssell to Boecknesse northwest, and northwest and by north	117 leagues
From the Marsdiep to Aberdine northwest somewhat northerly	113 leagues
From the Marsdiep to the Liet. of Berghen in Norway north	117 leagues
From the Marsdiep to the north end of Hitland northnorthwest	160 leagues
and then you shal fall about five leagues to the eastwards of the land.	
From the Marsdiep to the Naze north and by east	93 leag.

Heights.

THe Marsdiepe lieth in 53 degrees, saile out of the north sea, (being in that height) east on, and you shall fal right with it.

How these lands doe shew themselves at sea.

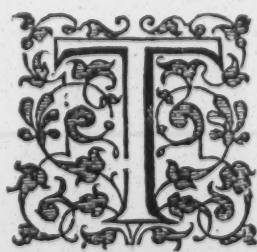


Thus appeareth the Island Tēssell when it lieth east and by north from you,

Huyfdowne sheweth it selfe thus, when it is eastsoutheast from you.

C A H P. I I.

Of the coast of Holland betwixt Tēssell and the Maes.



Tēssell is a long plaine Island, whereupon stand 4 Churches, the Westermost hath a high sharpe steeple, and is called Westeyndt, or S. Iohns, but by the Pilots it is called the Westen, or the Wambus. To the southwards of that stands an other sharp steeple called the Hoorn. The third is called the Burgh, which standeth somewhat more to the northwardsthen the other two before said. The

fourth is called the Oogh, or the Koogh, which is the northernmost of them all, without a steeple, and is covered with blew slates.

The Eyerland lieth close to the eastwards, or to the northwards of the Tēssell, & fast to it, when it floweth somewhat high, it is divided off from the Tēssell by the sea, and made to an Island: it sheweth it selfe off at sea like a low plaine little Island with little hommocks, there standeth upon it no more then two little houses.

Huyfdowne is a short point of land with some white sandhills, whereof the greatest and highest is called the Kyckdowne, or Kyckers-downe, the next to the southwards of it, is called Dirckooms-sand-hill, further to the southwards they run flat off by little and little, and at length to nothing in a flat plaine strand. Upon the east end, called the Helder, ly also some sandy hills, betwixt the Helder and the Kyckdowne it is most flat strand, with some sandy hills like a dyke, upon which (about halfe way betwixt both) standeth the little or the outermost cape, the great cape standeth somewhat within the land, about east from the Kyckdowne.

Huyfdowne, or the Marsdeepe and the Maes lie southsouthwest somewhat southerlie, and northnortheast somewhat northerly about 24 leagues asunder. From Huyfdowne to Petten the coast lieth south and by west foure leagues. Petten hath a little Church with a little steeple, and thereabouts you shall see two other little sharpe steeples in the Northland. A little to the southwards of Petten lieth the Hondbosch, a league to the southwards of Petten lieth Camperdowne, the best land to be knowne thereabouts, the north end is a high steepe white sand hill, which goeth sloping downe: the southermost part is gray and rough, being growne over with heath, or spyric grasse, to the southwards of it ly many rough hommockes or sandhills, where sometimes you shall see amongst them a white spot, so that it is verie good to be knowne. From Petten to Egmond upon the sea, it is three leagues. Egmond upon the sea is also verie good to be knowne, for it hath a thick flat steeple, which standeth like a saile in the sand-hill, and a little to the southwards of it you may see Egmont-within, which hath two high steeples upon the Abbey close one to the other, whereof the one is sharpe, and the other (to wit, the northernmost) is flat, because the spyre is lately fallen down. A little to the northwards of the Abbey standeth another steeple of the church upon the old walles, but it is not so high as that upon the Abbey: so that upon all the coast of Holland, there is no place so good to be knowne as this. From Egmont upon the sea to Wyck upon the sea, are three leagues, that is also a flat steeple: when you are thwart of Wyck upon the sea, you may see Beverwyck a little to the northwards of it, which is a high thick, & sharpe steeple; Besides that, you may see also betwixt Egmont & Wyck upon the sea Caltrimcom, and more other sharpe steeples. From Wyck upon the sea to Santfort, it is three leagues. Santfort hath a sharp steeple, with a high fire-beacon, a little to the southwards of it, in the black sand-hill which sheweth it selfe also like a steeple. To the northwards of Santfort lieth a high white sand-hill, amongst over which you may see Harlem, a high square crosse Church, which hath a high sharpe steeple upon the midst of the church, and also to the northwards of it, a high smal steeple, called Baeknesse steeple; thwart of it hath the coast of Holland a great bay. From Santfort to Nortwyck upon the sea, are three leagues, that is a flat steeple, whereby standeth a fire beacon. To the northwards of Nortwyck upon the sea, you may see Nortwyck within, a flat steeple whereupon standeth a little cap not very high, and upon the midst of the church standeth a little small tower. From Nortwyck to Catwyck upon the sea, it is a great league, being also a flat steeple, which in times past hath had a spyre: to the southwards of it standeth a high fire-beacon, to see to like a steeple: you may also see thereabouts within the land (when you are ot very farre from the shoare) Catwyck upon the Rhyne, and Rynsburgh, and Valckenburgh, all sharpe steeples. From Catwyck to Schevelingen are three leagues, the Quire of Scheveling church is somewhat higher then the church it selfe, in manner as the Haeghs church: a little

Eyerland.

Huyfdowne

Petten.

Egmond upon the sea.

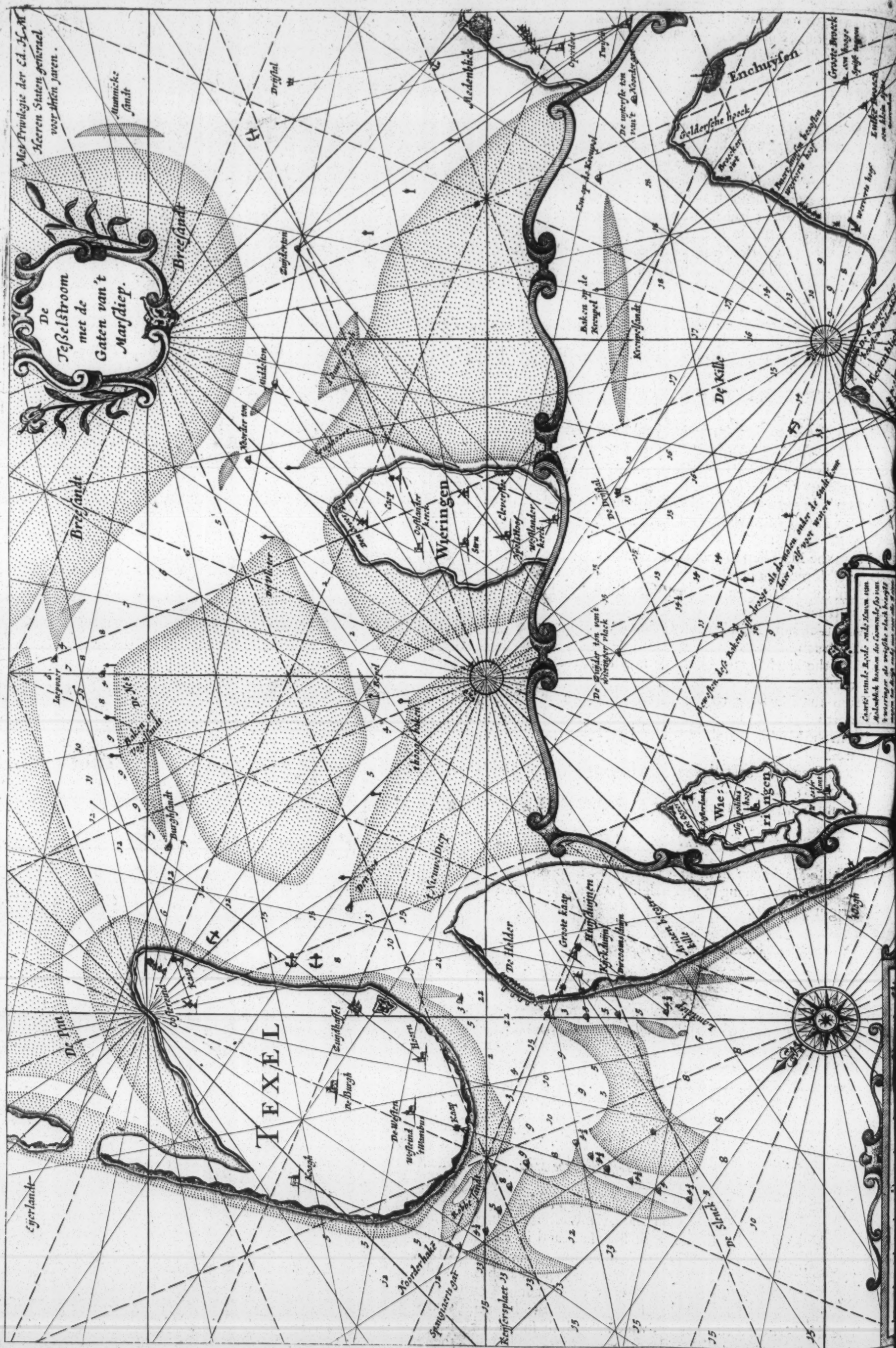
Wyck upon the sea.

Santfort.

Nortwyck.

Catwyck.

Schevelingen.



little to the southwards of that church standeth also a fire-beacon. About halfe a league within the land, you may see the Church of the Haghe, which is verie good to be known, the Quire is higher then the body of the Church. The Haghes steeple you may see farre above any other part of the land. From Scheveling to the Heyde it is two leagues, & from thence forth to Gravesand, or to the north side of the Maes, one league. The Heyde is a village without a steeple, but a little within the sand-hill, standeth a flat steeple called Monster. Gravesand is a high sharp steeple, verie good to be knowne, which standeth on the north side of the Maes. The Brill is a great flat steeple on the south side of the Maes. All this coast of Holland, from Huydowne to the Maes, is altogether a cleane strand, which men may come so neare to as they will, into 4 and 5 fathome.

The course of the streames.

IN the north sea the tyde falleth round, more then halfe tyde, upon the Broad fourteens, it turneth about with the Sunne or the Moone, and falleth but a quarter tyde right alongst the sea. Neare the coast of Holland and Zealand, the tyde falleth (whether it be flood or ebbe) somewhat sloping towards the land, but in the midst of the tyde it falleth right alongst the sea, and in the last of the tyde, it setteth to seawardes, towards to the westwards or the northwardes.

Betwixt the Marsdeepe and the Maes in the safewaie, the fore-flood commeth out of the north sea, and turneth about with the Moone, falling towards the land northeast, and northeast and by north.

The fishermen of the Maes say, that when they are out of sight of the land, they can perceive in calme weather by the turning about of the tyde, whether they be to the northwardes or to the southwardes of the Maes. Somewhat to the southwardes of the Maes, the after-flood turneth about against the Sunne, but to the northwardes of the Maes, it turneth about with the Sunne, untill the last quarter, and then it setteth towards the shoare, or the coast next unto it. They say also, that alongst the coast of Holland, men have no helpe of the ebbe in turning to windwards towards the Maes, except they be without sight of the land, because there goe no ebbs by the land, when the wind is to the southwardes of the west.

Of the depths and grounds about these places.

FIVE or fixe leagues without the Tessel, lieth the Broad fourteens, lying from thence northeast with a small taile,

which lieth about north from the Tessel, and northwest from the Fly, to the southwardes it runneth with the east side against Catwyck or Scheveling, but the west side lieth off at least eleven or twelve leagues thwart off to seawards from Nortwyck and Catwyck, it is a bank most of fourteene fathome deepe, in some places somewhat more or lesse. Betwixt it and the land it is againe eightene and nineteene, and to the northwardes twentie fathome deepe. When you come over it about the Tessel or the Flye, and come againe in sixteene or seventeen fathome towards the land, then you shall begin to see the land.

There runneth off to the southwardes into the sea from the coast of Holland there small bankes or ribbes, which are somewhat broad and shold by the land, & runne off sharp & deep to the end, the first Fishermen call the Small-eight, and beginneth a little to the southwardes of Egmond upon the sea: the second the Wterib thwart of Wyck upon the sea: the third & southermost the Hard, a little to the northwardes of Santfoort.

The high steeples of Holland, and Westfrieland, as Egmond-within, Wyck upon the sea, Santfoort & other more, men may see before they can see the sand-hills five leagues without the land, in 14 or 15 fathome, that is, upon the south end of the Broad-fourteens, but Camperdownes, and the sand-hills thwart of Harlem, they may see before they can see some of the steeples. The steeples alongst the coast are most of them flat, except the Beverwyck, Schevelingen and Santfoort.

Before the Maes and Goeree men may see the land in fourteene and fiftene fathome.

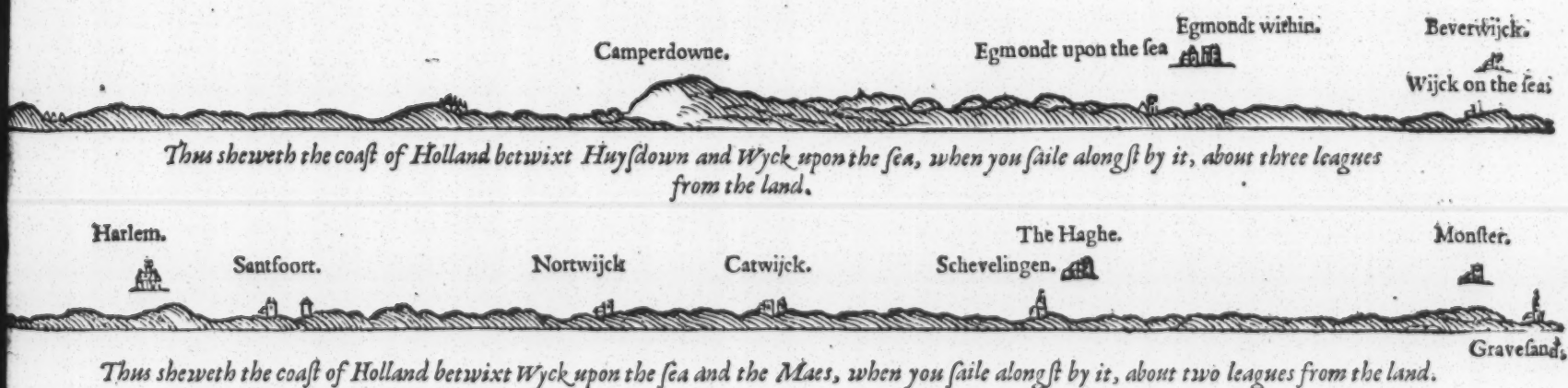
Courses and distances.

From the Maes or Goeree to Dover, southwest and by west somewhat westerly	35 leagues
From the Maes to the north Foreland, westsouthwest westerly	32 leagues
From the Maes to the Naze, west	29 leagues
From the Maes to Hitland northnorthwest	180 leagues

Heights.

The north side of the Maes lieth in 52 degrees,

How these lands doe shew themselves at sea.



CHAP. III.

Of the Maes, and Goerees gat or channell.

THE Maes hath two channell, or deeps, the norther channell goeth in by the north shoare, and the souther by the south shoare, or by the land of the Briel. Betwixt these two deeps lieth a great place of sand, called the Honde-plate, there remaineth at low water upon it six and seven foot, and at some places eight foot water.

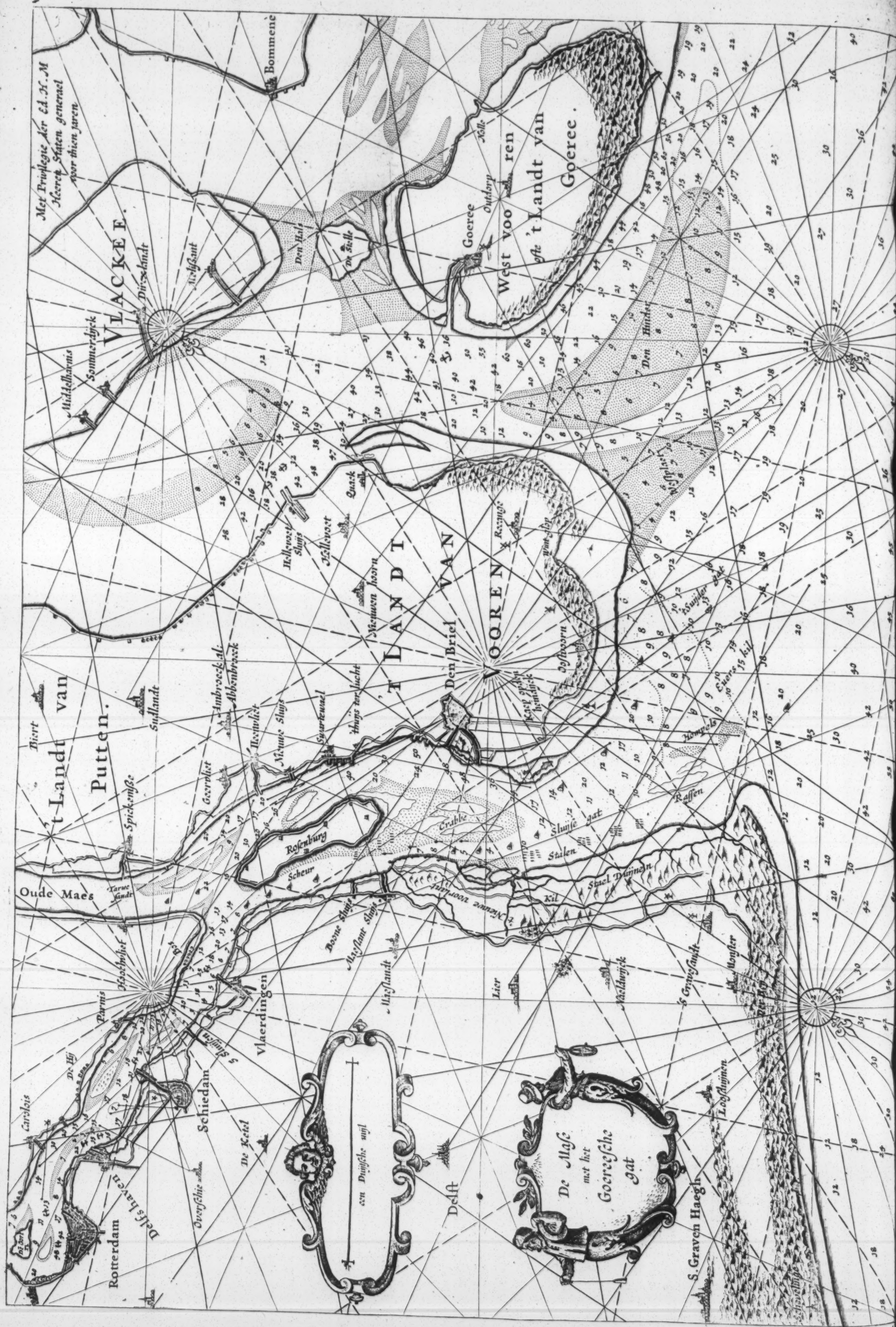
Vpon the north shoare of the Maes about southwest from Gravesand, stand two capes. For to saile in at the norther

j Booke West. water.

channell, bring the innermost of the two, that is the greatest cape, a halfe handspikes length to the southwardes of the outermost, & then they shall stand a little more southerly then east from you; keepe them so standing, and saile so right in, and you shal not misse to fall right with the outermost buye, which lieth at low water in twentie foot. Or else if you come from the northwardes alongst by the strand, and keepe the founding of the shoare in twentie foot at low water or somewhat more, according as it shall have flowed, you shall fall right with the outermost buye: or if you keepe neerer to the shoare in eleven or twelve foot, then you shall fall with the second buye. From the outermost buye to the second, saile yet right in with the capes, which lieth in ten or eleven foot upon the showld of the channell, right thwart of the

B

outer-



most point of the land on the north side, but nearer the Honde-plate then the point which lieth off from the north point, so that you must goe about to the northwards of it in sailing in, you may also for need goe to the southwards of it, but alongst to the northwardes it is broadest, but in all it is not wide. From the north point runneth off a little tayle, whereof you must take verie good heed, it is verie steepe, upon it the sea breaketh & rippleth verie much: with westerly windes the sea is all in a breach all over that northerne channell thwart of this foresaid second buye, so that to see too, it sheweth it selfe as if it were not a channell; but feare not to runne close alongst to the northwards of the foresaid second buy, thwart of it you shall not have lesse at halfe flood then thirteene foot water, or there abouts. From the second buy to the third, the course is a little more northerly: you may see perfectly inough from the one to the other. When you come to the third buye, the innermost cape standeth a little to the northwards of the outermost. This third buye lieth at the north end of the Rasses also in eleven foot as the second, which you must also goe about to the northwards of. Betwixt the second and the third in the farewaie it is also all one depth. The north shoare is steepe about the second buye, but towards the third buye it is somewhat flatter.

The fourth buye lieth from the third southsoutheast upon the south end of the Rasses. The Rasses is a great sand-rib on the east side of the Hondeplate, which is very steepe, & with low ebbes commeth above water at some places.

Betwixt the third and fourth buy it is deepe in the right farewaie fourteene, fifteene, and sixteene foot, that the Fishermen call the Panne, on the northeast side it is there rising ground, which in turning to windward you may borrow of it by your lead so shold as you will. When the steeples of Monster and Gravesand come one in the other, then you are past the Rasses. The fifth buy lieth in eleven or twelve foot water upon the east point of the new ribbe, and lieth from the fourth buye southeast and by south: all which buyes you must leave on the starboard side in sailing in. To the eastwards of it, the souther and norther channells come together in one. From the fifth buye to the sixth, which is the buy against the Polder, it is most one course as before, but you may easily see from one to the other, that you must leave also on the starboard side; thwart of it in the farewaie, it is sixteene and seventene foot deepe. Comming to the eastwards of that buy against the Polder, you shall see a house upon the dyke betwixt Swartewall & the head of the Briell, called the house of Lucht, bring that over Ambroeck, which it somewhat a flat steeple, a little to the southwardes of Swartewall, and saile so right in with them, untill you come before the Briell, if you desire to ancker there, and you shall so leave two buyes more on the larboard side. The first is the eastermost buy against the Polder: the second, the buye upon the Crab, which lieth off from the Iland Rosenburgh untill past the Briell. But if you will not ancker before the Briell, but will saile further up, then runne up right with the foresaid markes of Ambroeck, and the house of Lucht, untill you come neare the shoare, and then alongst by it, untill you come to Heenvliet. From the east end of Rosenburgh runneth off a tayle, which you might saile within when you saile upwardes. If you bring not the Tower of the Briell, (when you are past the heads of Swartewall) without or to the northwardes of these heads, but keepe it to the southwardes of them, then you cannot saile within it, but shall saile farre enough alongst to the southwardes of it. A little to the eastwardes of Heenvliet goeth in the old Maes, the flood falleth in there verie strong, whereof you must be carefull, that you be not carried upon the Wheate sand, that is a great plate of sand lying in the midst of the mouth of the old Maes, which falleth a great waies dry at low water, & lieth out with a long small point to the westwardes into the Maes. For to avoid it, you must look out for a wood of trees standing on the south shoare, a little to the eastwards of the old Maes, keepe the steeple of Rotterdam to the northwardes of that wood, and then you shall goe cleare of that Wheat sand, but if you let

that steeple come to the southwards of that foresaid wood, you shall certainly come to touch upon that foresaid tale. To the northwardes of the Wheatesand goeth in a deepe, which men may saile up in the old Maes to Dordrecht; in it lie also two buyes, he that will runne in there, let him run in by the foresaid markes of the steeple of Rotterdam, and the wood of trees, so long untill that the steeple of the Briell come to a tyled house which standeth upon the southside of the east end of Rosenburgh, and keepe them so standing, & then he shall not misse the buy. Being past the old Maes, you must saile up, keeping the middle of the channell past Vlaerdigen unto five Sluces; from thence you must chuse the south shoare, and runne close alongst by it, untill you be over a little shold or banke, whereupon is at low water eleven or twelve foot water, the neerer the south shoare the deeper, lying thwart over the Maes, as soon as you shall be past that, then goe right towardes the head of Schiedam, *Delfshaven.* there you shall have the deepest water.

If you will goe to Delfshaven, then (being past Schiedam) keepe the sounding of the north shoare, and runne alongst by it untill you come before the haven, and ancker there. But if you will saile to Rotterdam, then runne alongst by the north shoare, so long untill that Overschie and the house of Spain come one in the other, then edge over, or a little sooner unto the south shoare, and runne alongst by it, or bring the steeple of Vlaerdigen (when you are past the head of Schiedam) over the third house upon the Schiedams head, and keepe that so standing so long untill that the mill, and the head Charlois (whereupon standeth a little wood of trees) come one in the other, and so you shall leave on the larboard side, a little shold plate, that lieth about halfe waies betwixt Schiedam and Delfshaven, and runne alongst to the southwards of the shold that lieth before the haven. Vpon that foresaid plate remaineth no more then seven foot water, and upon the shold before the haven, but two or three foot water, and are both verie steep. When the foresaid mill, and the head of Charlois come one in the other, then keepe them so standing untill that you come thwart of the new head of Rotterdam, saile then towards the towne, and close alongst by it, in betwixt the towne and the plate, there you may ancker.

For to find the souther channell (comming in out of the sea) before you can see the capes, you must bring the steeple of the Briell (which is a thick flat steeple without any spire or sharp top upon it) eastsoutheast from you, or somewhat more easterly or southerly, according as you get sight of the capes; then bring them one in the other, and runne so right in with them, or els if you bring the steeple of the Briell a handspikes length to the northwardes of Oostvoorn, and runne so right in, you shall without saile run in sight of the outermost buy, which lieth at low water in three fathome.

From the outermost buy to the second and third buy, you must saile yet right in with the capes; the second buy lieth in thirteen, and the third in eleven foot; being thwart of it, the steeple of Goeree commeth a little upon the footstrand of the land of the Briell. The fourth buy lieth from the third, yet neere upon the same course right in with the capes, but a little more southerly. Betwixt these buyes is the shouldest of the Maes ten foot, by the fourth buy it beginneth againe to be deeper, that lieth in 11 foot. From without unto the fourth buy, the channell is of a good bredth, so that you may turne in to windwardes a good waies on both sides of the buyes, and borrow of the shoares on both sides by your lead, but right alongst a little to the southwardes of the buyes, is the perfect deepest water. The fifth buy lieth from the fourth eastnortheast, and northeast and by east, on the northside of the deepe on the Honde-plate in eleven foot, which you must leave on the larboard side, and runne in about to the southwardes of it. From the fourth to the fifth buy alongst to the southwardes of the buyes, in the right farewaie, it is deepe 13, 15, 16, 17 foot, and by the fifth buy five fathome. The sixth buy lieth from the fifth east and by north in eleven foot and a halfe, also on the north shoare, or Honde-plate, alongst to the southwardes of it, the channell is at the narrowest, and 5 and 6 fathome

deepe, the south shoare is there abouts verie steepe, close to it, it is fixe and fixe fathome and a halfe deepe. As soone as you come past the fixth buye, then commeth Maeslands-slucce, and the steeple of Vlaerdingen one in the other; keepe them so one in the other, and runne in so right with them, so long untill that you get the house of Lucht over Ambrough, and then you shall runne farre enough alongst to the northwardes of the Polder, & by the side of the seventh buy, alongst in the right deepe; you shall finde in this farewaie foure, and four fathome and a halfe: go then towards the Briell, or upwardes along where you desire to be, as is said here before in the description of the norther channell.

N O T E.

All these foresaid depths, and those which follow of the Goerees gat, are set here (as also in the Carde) according to the lowest water, of a common tyde, and it floweth there 6 foot up and downe.

The Goerees-gat.

Quacks
deepe.

Betwixt the land of the Briell and Goeree, go in also two channells, the northermost is called the Quacks-deepe, and is not for great ships, but onely for smackes, and small shippes: the other is the Goerees-gat. Betwixt these two channells lieth a great plate called the Hinder, which at low water is not deeper then 5, 6, and 7 foot. To the northwardes of it goeth in the Quacks-deepe, and to the southwardes of it the Goerees-gat.

For to finde the Quacks-deepe comming in out of the west, you must keepe the steeple of the Briell east from you, and run so in, untill that a great countrey house, (which you shall see stand alone a little within the point of the Quacke) come to the southermost sand-hills of the land of the Briell, which shall then stand neare about southeast from you, keepe that then so standing, and run so right in, untill that Oostvoorn come to the westermost or southermost sand-hills, then run in alongst by the strand somewhat more southerly, untill that Goeree come to the eastwards, or within the sand-hill, and then you shall bee past the east point of the Hinder, which the Pilots call the Buyen, run then towards Goeree, or to the eastwards, to Hellevoets sluce; where you desire to be.

Goerees
gat.

For to saile in at the Goerees gat, you must bring the steeple of Goeree, and the cape upon the land of Goeree, one in the other, & then they shall stand east and by south, and eastsoutheast from you: or if you cannot see the cape, then bring the steeple east and by south eastsoutheast from you, according as you shall have the wind, saile in right with it, untill you come hard aboard the strand, & within a bowles cast in alongst by it, east and by north, & east in, so long untill that the land doe fall away more to the southwardes:

there abouts runneth off from the shoare a little taile which men might saile within, in going out, but not in comming in, there you must edge a little further off from the shoare, being past that, luffe up again towards the shoare, or haven of Goeree, and ancker there before it; or els if you will run up to Hellevoetslucce, then bring the mill which standeth to the westwards of Goeree, a little to the northwardes of the steeple of Goeree, keepe them so standing, and saile so up to Hellevoetslucce, and you shall not come neare the plate which lieth over against or to the southwardes of Hellevoetslucce.

When you saile in at the Goerees gat with a bare southerly wind, and that you cannot bring the cape and steeple one in the other, you may bring the steeple well eastsoutheast or a great capstone bars length to the northwardes of the cape, and then run over untill you come against the strand, and so you shall run over the taile of the Hinder in 14 and 15 foot at low water, but when the cape and steeple are one in the other, you shall not have lesse then 19 or 20 foot. Being come over the taile of the Hinder, in the right deepe, it is 6, 7, and 8 fathome deepe, the neerer the strand the deeper water. A little within the cape, or almost thwart of it, is the narrowst of the channell, further in, it is wider; on the north side towards the Hinder, it is rising ground, but the south shoare alongst by the strand is verie steepe.

Of the tydes, and course of the streames.

Before the Maes a southwest and by west, & a northeast and by east moone maketh a high water.

Before the Briell a southwest and southwest and by south, and northeast, and northeast and by north moone.

Before the old Maes a southwest and northeast Moone.

Before Rotterdam a southwest & by west, northeast & by east moone.

Before Dordrecht a westsouthwest Moone.

In the Goerees gat, and before Goeree, a southwest and by south and southsouthwest Moone.

Before Hellevoetslucce a southwest and by south Moone.

Betwixt the Marsdeep and the Maes in the farewaie, the fore-flood commeth out of the north sea, and turneth about by little and little northeast & by north towards the land.

In the sea thwart of these places, (without sight of land) it is a point, or a point and a halfe later full sea, the further from the land the later.

Not verie long after that the flood beginneth to goe without the Maes, it doth beginne also to go into the Maes, but the after-flood falleth strong in, and so likewise in the Goerees gat. Close before the channells by the land, the tyde turneth about with the Sunne, so that when the afterflood falleth into the channells, it turneth to the southwardes, & becommeth again a running ebbe: the after-ebbe falleth againe thwart off to seawardes out of the channells.

The rising of the land of the Maes, and Goerees gat.



Graveland S. E. by S.



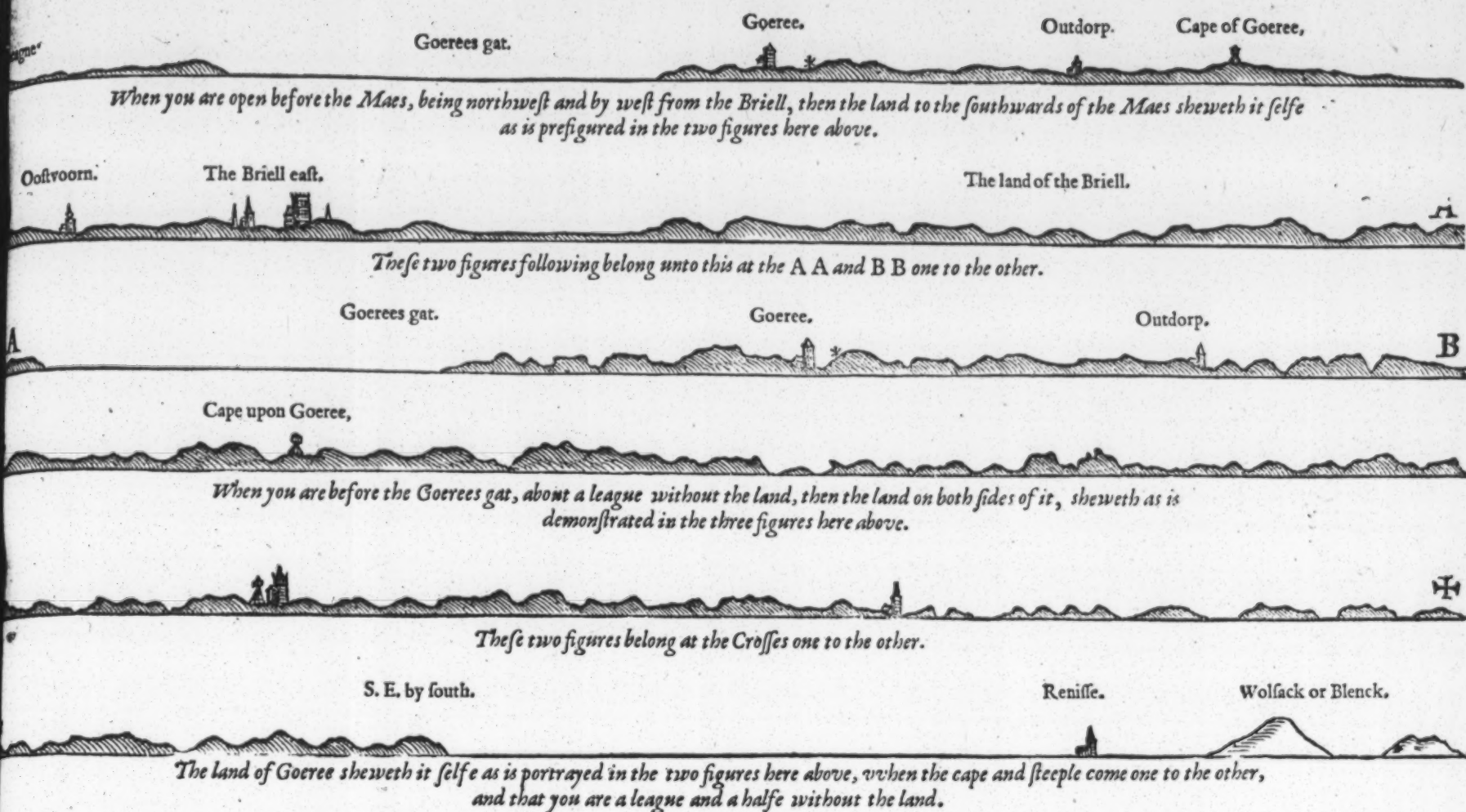
When Graveland is southeast and by south from you, being a halfe league without the land, then the coast of Holland to the northwards of the Maes, sheweth it selfe as is portrayed in two figures here above.



The outer S. Cape. The Inner S. Cape. The Briell S.E. by E. Oostvoorn.



These two figures belong one to the other.



C H A P. I V.

The channells of Brewers-haven, Zierickzee, and Ter Veere.

Betwixt the land of Goeree & Schowen, there goeth in also two channels, the northermost is called the Kevitsen, which is onely for small shippes; the southermost for great shippes is called the Brewershaven channell. Betwixt them lieth a great dry sand, called the Springer, which floweth not under, but with very high floods.

For to find the Kevitsen, you must bring the steeple of Zierickzee southeast & by south, or a little more southerly from you, & then you shall espy upon the land of Schowen, about the steeple of Zierickzee, a wood of trees, bring that and the foresaid steeple of Zierickzee one in the other, and runne so right in untill you come against the sand, so shouldest or neare as you can, & then you runne farre enough alongst to the westwards of the west head. When you come within the west head, against the sand on the south side, then goe in east alongst by the foresaid dry sand the Springer, at the end of the aforesaid dry sand shooteth off also a point under water, the which you must sound for: being past that, runne then directly with Brewers-haven, as is shewed in the Card. In this channell it is upon the shouldest ten foot deepe.

The Brewers-haven.

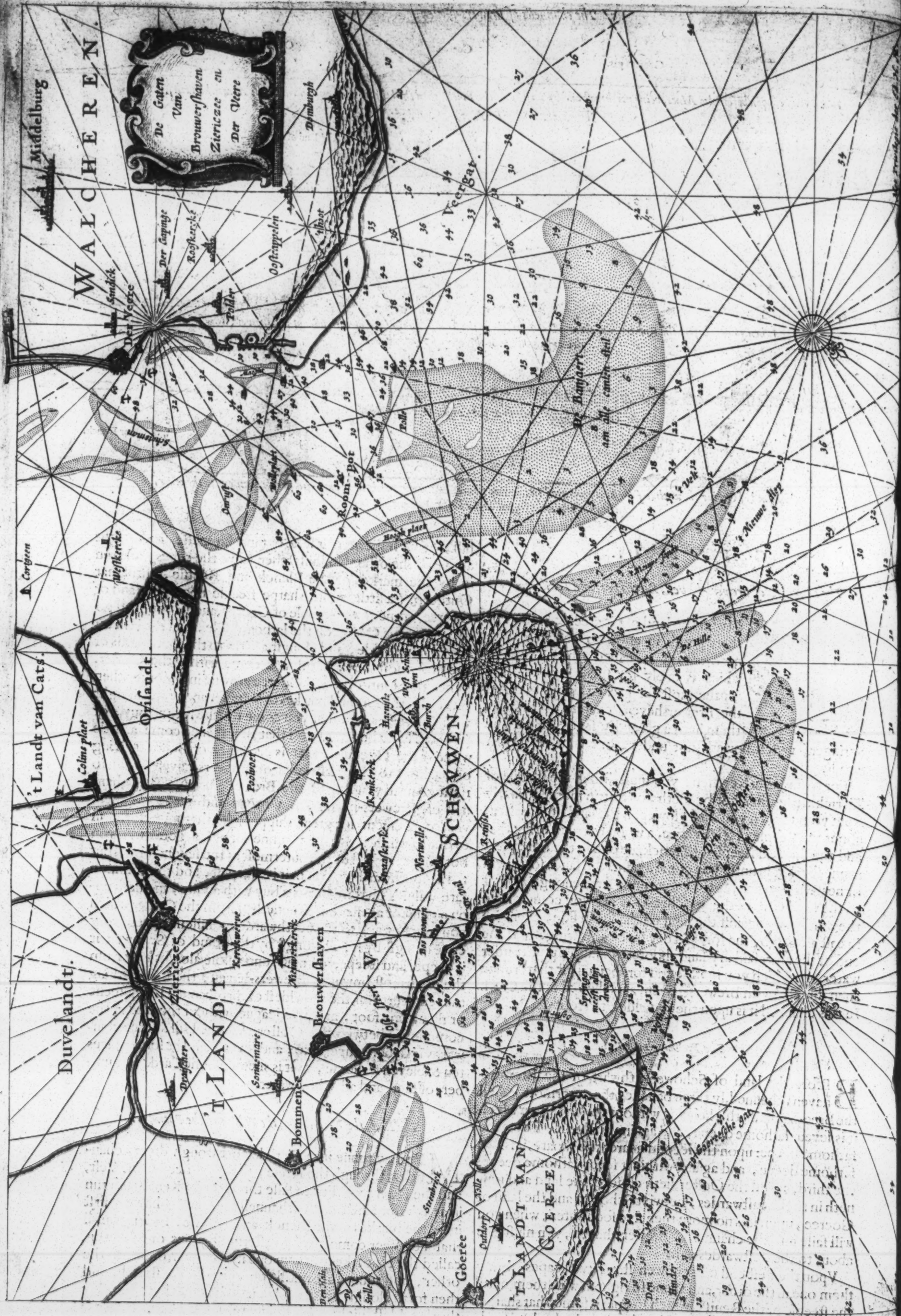
Before the land of Schowen, thwart of the Brewers-havens channell, ly three banckes, the outermost, called the Bree-banck, lieth a kenning without the land, upon which it is seven fathome deepe, and againe within it, nineteene fathome deepe: upon the second nearer the shoare, it is five fathome deepe, and againe within it seven fathome deepe: the third, called the Ooster, lieth close by the land and runneth in to the eastwardes, betwixt Schowen and the land of Goeree, upon it is no more then six foot water, when you will saile into the channell of Brewers-haven, you must goe about to the westwardes of it.

Vpon the west end of Schowen stand two capes, bring them one in the other, and runne so right in with them, untill the steeple of the Renisse (which steeple is somewhat sharpe) come to the Blenck or Wolfack, that is, a high white sand-

hill, (which sheweth it selfe out in whitenesse, and height above all the other sandhills) then leave the capes, and run in by the markes of the Blenck and Renisse, untill that Outdorp, (a little white sharpe steeple upon the land of Goeree) come to the steeple of Goeree, and so you shall go in betwixt the Ooster on the larboard side, and the Hill on the starboard side, and alongst a little to the southwards of the outermost buy, untill you come within the Ooster. When that Outdorp and Goeree are one in the other, then leave also the foresaid markes of Renisse, and runne in right with Goeree, untill that you come by the second buy; or (if there ly no buyes) untill that Bommenee come a little without the Oxetaile, that is, a point of Schowen lying out a little to the westwards of Brewers-haven, saile so right in untill you be past the Brewers-haven. This channell of Brewers-haven, is a broad and deepe channell, very convenient for great shippes, he that must turne in or out to windwards, may runne alongst a good waies on both sides, as well of the outermost as the second buy, but to the southwardes of them it is deepest, and the common fare-waie. The third buy is a buy with a taile, and lieth upon a point of a taile which runneth off from the Ooster, which you may not goe to the northwardes of, unlesse it were very close alongst by it: all alongst by the strand of Schowen it is deepe, and steepe, you may runne close alongst by it from the outermost buy unto Brewers-haven, there is nothing that can hurt you, the shouldest of this channell is eightene or nineteene foot, at least a league without the land in the comming in betwixt the Ooster and the Hill: further inwards it is foure, five, sixe, and seven, and at some places ten & eleven fathome, as it is shewed in the Carde by numbers of feet, and all at low water.

The Keel, the New-deepe, the Velt, and the Roompot.

MEn may runne into Zierickzee through divers channells, through the Keele, the New-deepe, the Velt, and the Roompot. For to saile through the Keel, then run in as is before said of the channell of Brewers-haven, first in by the markes of the Blenck and Renisse, so long untill that Ter-Veer come to the westermost point of Schowen, called the Hoot, keepe them one in the other, or one to the other, and runne so in untill you come by the strand, and then forth alongst by it, and you shall find so in the Keel at the shouldest, eightene and nineteene foot, and comming



WALCHEREN.

De Gaten
Van
Brouwershaven
Ziericzee en
Der Vlere

Middelburg

Sandick

Der Vlere

Der Gapinge

Rogherke

Oosterschelde

Dimburch

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againſt the point of the Hoot, foure & five fathome. Betwixt the Hoor and the New ſand, (which falleth at the eaſt end at ſome places dry) runne all alongſt by the land of Schowen, untill you come thwart of the ſouthermoſt cape of Schowen, edge then ſomewhat off from the ſhoare towards the Banjaert, for to avoid a ſhoare which lieth off from Schowen, which you might faile within when you come in out of the ſea. There lieth a buy upon the point, whereby it is good to be knowne; being paſt that, runne all alongſt by the ſhoare, untill you come to Zierickzee: ſomewhat within the buy, upon the point of the ſhoare, there is lately laid an other little buy for thoſe that will faile that waies out, for that they may not faile upon the eaſt ſide of the foreſaid ſhoare.

For to faile in at the New-deepe, you muſt looke out for two ſtone fire-beacons, ſtanding a little to the ſouthwardes of the foreſaid capes of the channell of Brewershaven, bring the innermoſt a handſpikes length to the ſouthwardes of the outermoſt, and runne then right in with them, and then you ſhall runne in betwixt the Hill & the New-ſand in fixteen, ſeventeene, and eighteene foot, go in alongſt by the foreſayd markes, untill that you come by the ſtrand, and then you come into the Keel. If you bring the fire-beacons one in the other, and faile ſo right in, you ſhall then runne over the tayle of the Hill in eleven or twelve foot. The Hill is a ſand ſomewhat flat, which men may come neere to the ſouth ſide by their lead, but the New-ſand is very ſteepe, and the ſea breaketh very much upon it. When as that you come in by the ſtrand into the Keel, then run in alongſt by the ſtrand, as is beforeſayd in the deſcription of the Keel.

For to faile in at the Velt, you muſt obſerve theſe markes here under deſcribed: almoſt upon the ſouthermoſt end of Schowen ſtandeth a tower alone in the field, with a cape upon it, called Weſt-schowen, bring that tower a capſtone barres length to the ſouthwardes of the foreſayd ſouthermoſt cape of Weſtſchowen, and runne ſo right in, and then you ſhall runne through betwixt the New-ſand and the Banjaert; and ſhall find upon the ſhowdeſt (thwart of the outermoſt point of the New-ſand) twelve and fourteene foot; being paſt that, there will be againe fifteen, ſixteen, and eighteen foot, and by the ſtrand twenty foot deepe. When you come in by the ſtrand, runne all alongſt by it untill you come even to Zierickzee, as here before is ſayd of the Keel, and the New-deepe. When you runne in at this channell, you muſt take very good heed of the Banjaert, which is very ſteepe upon the north ſide; cloſe to it, there is three, four, and five fathom, but thwart of the foreſayd ſtrand which lieth off from Schowen, fixe and ſeven fathom deep. The New-ſand is indifferent flat on the ſouth ſide, that you may borrow of it by your lead.

The Veer-gat.

For to faile in at the Veergat (comming from the northwards) you muſt keepe Weſtchappell not to the weſtwards of ſouth from you, and then you cannot come too neere the Banjaert: but if you bring Weſt-chappell to the weſtwards of the ſouth from you, you ſhould lightly faile upon the Banjaert, run ſo right with Weſt-chappell, untill that Middlebrough come over Eaſt-chappell, then you are to the end of the Banjaert: faile then right with Eaſt-chappell & Middelbrough, untill that Cortgeen come through, or a great capſtone barres length to the Southwardes of Weſtkerck, that are two towers ſtanding in the ſuncken land, and ſhall be then about eaſtſoutheaſt from you, keepe theſe towers ſo ſtanding, and run in ſo right with them, and you ſhall runne in ſight of the firſt buy of the Veergat. In the Veergat ly three buys with two bottomes, of ſaſhion like great Hogſheads, which you muſt leave all on the ſtarboard ſide. Before you come to the firſt buy, you ſhall faile by another buy on the larboard ſide, lying upon the point of the Polle, which is a point of the Banjaert, that is, a Peare-buy, of ſaſhion like all other ſea-buys that ly in the Maes or els-where. The foreſayd firſt buy in the Veergat lieth in

three fathom and a halfe. From the firſt to the ſecond and third buy, the courſe is ſoutheaſt and by eaſt, or ſomewhat more ſoutherly, but you may eaſily ſee from the one to the other. The ſecond and third buys ly in two fathom, each upon a point of a plate called the Maide. Over againſt the third buy lieth a ſhowld called the Vnreſt, which lieth with a long ſharpe point towards the third buy, ſo that it is not there very broad betwixt them, therefore you muſt runne cloſe alongſt to the northwards of the buy: betwixt the buy and the foreſayd point of the Vnreſt, it is not deeper then twelve and thirteen foot, but thwart of the firſt and ſecond buy, it is broad and deepe enough. Being paſt the third buy, faile then right to Ter-Veer. Over againſt Ter-Veer lieth a plat called the Scotsman, which you have onely to avoid.

If you will goe in at the Roompot to Zierickzee, and that you bee come betwixt the foreſaid Pearebuy upon the point of the Polle, and the firſt or outermoſt buy of the Veergat, then commeth Domburgh to the Hoot, which is a white ſand-hill upon Walcheren, almoſt of ſaſhion like the Woolſackes upon the land of Schowen: keepe them one in the other, and you ſhall runne alongſt by two buys more, which ſhall ly on the larboard ſide alongſt by the Polle, and you ſhall ſee one buy with a tayle lying upon the weſt point of the Woolplate, over againſt the third buy of the Polle: betwixt theſe two buyes you muſt run through, leaving that with the tayle on the ſtarboard ſide, and runne about by it to the eaſtwards. There ly alſo two buys with tayles, (beſides the foreſayd) upon the Woolplate, you may eaſily ſee from one to the other, theſe you muſt leave on the ſtarboard ſide, and runne alongſt to the northwards of them, about eaſtſoutheaſt on, ſo long that the ſteeple of Koukerck (upon Schowen) come even without the point of Schowen, runne then right with that point, and about by it, and then alongſt by the ſhoare unto Zierickzee. When that you runne towards the point of Schowen, then you faile through betwixt two buys more, the one lying on the larboard ſide, upon the eaſtermoſt point of the Banjaert, or Hoochplate, and the other with a tayle on the ſtarboard ſide, upon the point of another plate called Poolvoet, lying betwixt the land of Schowen and Orefand. All the buys with tayles men muſt leave (in ſailing in) on the ſtarboard ſide, and thoſe without tayles on the larboard ſide.

The Fiſhermen runne (by day) moſt about to the ſouthwards of the Poolvoet-plate, & leave the foreſayd buy with the tayle, then on the larboard ſide; that plate is ſomewhat flat, that men may borrow of it by their lead, but they muſt ſound quick: but by night they runne by Schowen cloſe alongſt by the ſhoare, which is exceeding ſteepe and needle to.

Of the tydes and courſe of the ſtreames.

Before Brewers-haven a ſouthſouthweſt & northnortheaſt Moone maketh high water.

In the channell of Brewers-haven a ſouth and by weſt Moone.

At Ter-Veer a ſouthſouthweſt & northnortheaſt Moone.

In the Veer-gat a ſouth and north Moone.

It is not good to run in at the Veer-gat, eſpecially with a ſoutherly or ſouthweſt winde, before that the flood be halfe ſpent, for the after-ebbe, and the fore-flood fall thwart over the Banjaert hard in at the Roompot, towards the land of Schowen, but when the flood is halfe ſpent, then it falleth right in at the Veer-gat. When the Moone is ſoutheaſt or northweſt then the water is there already two third parts flowen.

Like as it is here before ſayd of the Maes & the Goerees gat, ſo alſo here before the channells of Brewers-haven and Ter-Veer, the flood turneth about with the Sun, ſo that the after-flood falleth in at the channells, and then afterwards turneth about to the ſouthwards, and becommeth a running ebbe, but the after-ebbs fal right out at the channells thwart into the ſea, and then with the fore-flood about again to the northwardes.

How these Lands doe shew themselves at sea.

Brouwers-haven.



The land of Schouwen sheweth it selfe thus when it is three or foure leagues thwart from you.



When you are before the channell of Brouwershaven, the land of Schouwen sheweth it selfe thus.

C H A P. V.

Of the Zealands Channells in the Wielings.



The Channell betwixt the lland Walcheren and Flanders, having divers deepes and channells, where men may saile in and out through with great shippes, as the Botkill, the Doorloy, the Spleete, and the Wieling. It is commonly called after one of the chiefeft of the same,

with the name of the Wielings. The greatest showlds, betwixt which these foresaid channells doe runne through are:

The Raffes. The Raffes ly alongst the west side of Walcheren:

The Raen. The Raen to the westwardes of it: The English Polle betwixt them and the coast of Flanders, lying off to the westwardes with a long small ribbe, unto thwart of Oostend.

The French Poolle. The Innerbanck lieth betwixt the east end of the English Polle and Casant, which is also called the French Pool, or the Ript.

The Botkill.

For to saile out at the Botkill, you must run from Flushing within two kables lengths alongst by the shoare, through betwixt the land & the Geer & the Raffes, the shoare is verie steepe, so that men may come close by it with great shippes, without any danger, the Raffes are flat on the east or the inner side towards the land. To the eastwardes, or to the southwardes of Souteland in that fareway it is 5 & 6 fathom deepe, but to the northwardes or to the westwardes it is deeper, & thwart of Westcappell 8 & 9 fathome.

When the Church of Westcappell (which hath a flat steeple) commeth over the mill, thwart of that runneth a channell through betwixt the norther and easter Raffes w. f. w. into the sea, where remaineth at low water no lesse then 2 fathome water, keepe westcappell and the foresaid mill one in the other, and run out so by them. When Buyens Church commeth over the foresaid mill of Westcappell, then keepe them one in the other, and you shall run then right out at the Botkill, through betwixt the norther Raffes on the larboard side, and a sand called Calloo on the starboard side. In the Botkill is not lesse then 4 fathom and a half depth, but upon both the Raffes remaineth at low water, no more then two foot and a halfe, and upon Calloo 3 or 4 foot.

Markes of the Botkill.

Calloo.

Querens.

Landdeepe.

To the northwardes of the sand Calloo lieth yet a plate called the Querens, lying to the northwardes almost untill thwart of Domburgh, betwixt them both is a channell of 4 or 5 fathom depth, called the Easter-gat; For to saile out there, or to finde it comming in out of the sea, you must bring Westcappell to the northermost head, which is a head very good to bee knowne, and run out or in thereby. Betwixt the Querens and the land goeth out yet a Landdeepe of three fathome and a halfe. For to finde that comming in out of the sea, you must runne to the shoare thwart of Domburgh (which is a sharp steeple) into three fathome, or two fathome and a halfe, and keepe the sounding of the shoare so neare as you please, and run in so alongst by the heads, untill you come within. When you come in at any of

these channells, and are come so farre to the eastwardes, as betwixt Buyens Church and Souteland, and that you must turne to windwardes with an easterly wind, then you may saile through betwixt the easter Raffes, and the plate to the eastwardes of it, called the Geere, and so come out in the broad channell into the Doorloy and Splete, and runne so about to the southwardes of the Geer unto Flushing.

About two leagues without the land of Walcheren, lieth a long small banck, lying southwest and northeast, called the Stone-banck, upon the middest whereof there is no more then two fathome, and upon the north end of it three fathome water. He that will saile in or out at the Botkill, or the channells to the northwardes of it, to wit, the Eastergat or Land-deepe, must sail about either to the northwardes or to the southwardes of that Stonebanck: When Middleburgh commeth over Domburgh, then are you thwart of this Stone-banck; but if you bring Middleburgh halfe waies betwixt Domburgh and Eastcappell, and saile so to the land, then you runne alongst to the northwardes of it. Or els if you bring Westcappell eastsoutheast from you, in a black valley of the sand-hills, and saile so right in, then you run alongst to the westwardes or the southwardes of it. Within the Stonebanck it is againe eight, nine, and at some places ten fathome deepe. Vpon the foresaid markes and courses, to wit, Westcappell e. f. e. from you in the black valley, you may saile right in at the Botkill: when that Eastcappell commeth then somewhat through Domburgh or to the eastwardes of it, then you shall get deeper water; goe then towards the shoare, and so alongst by it, as is before said. A little from the southwest end of the Stonebanck, lieth yet another, but it is not long, called the Oyfter-banck, upon it remaineth at low water about foure fathom water.

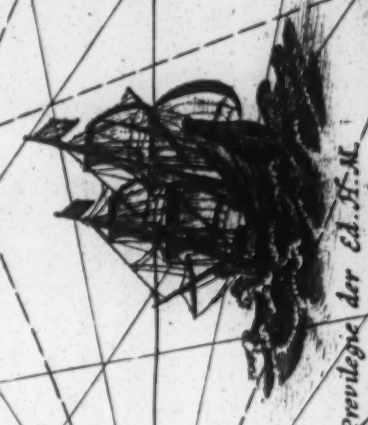
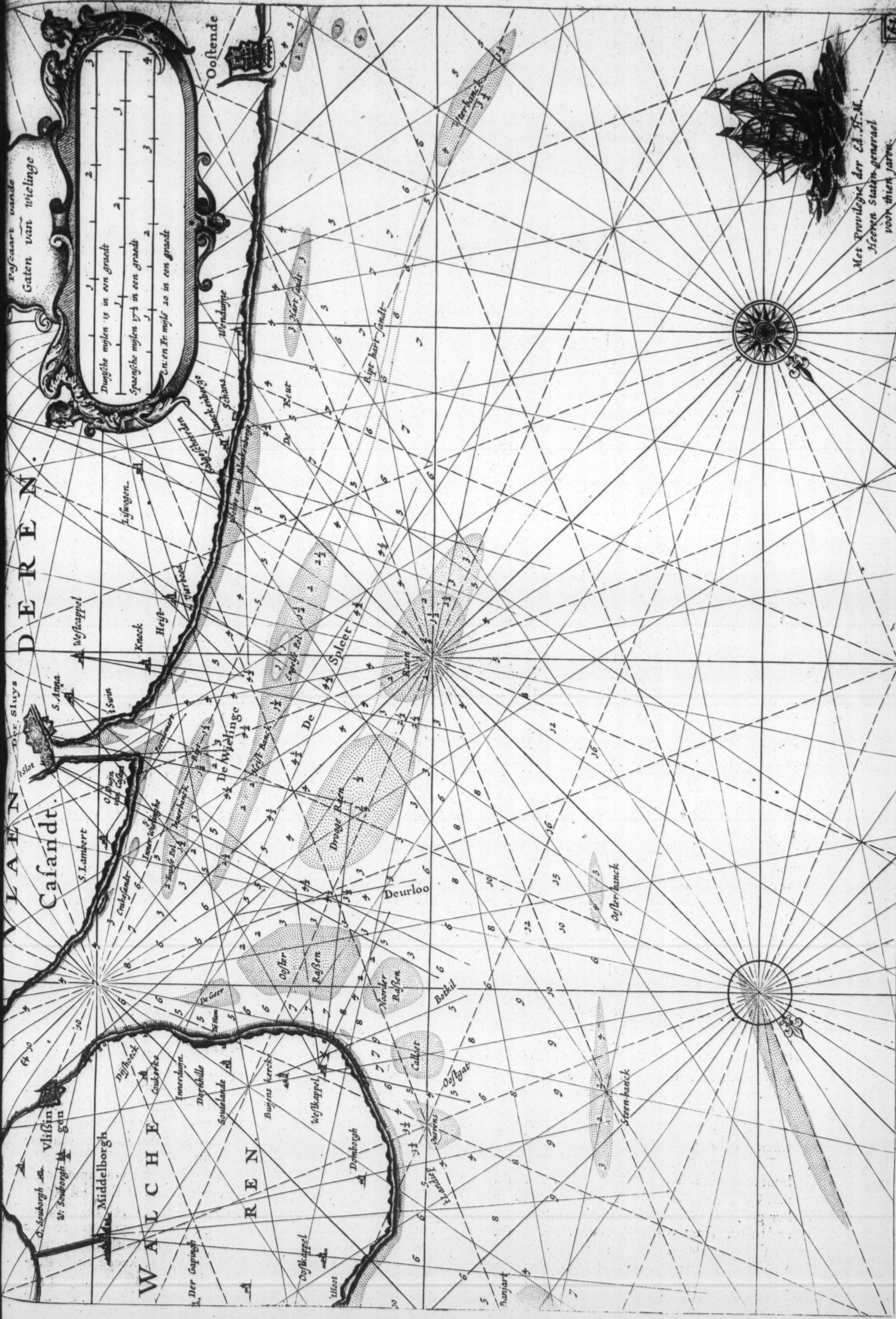
The Doorloy.

For to saile from Flushing out at the Doorloy with shippes that draw much water, you must set saile when the water is flowed an houre or two, for to come with halfe flood, or against the highest water to the showlds, goe from Flushing first alongst by the shoare, and then westnorthwest, untill that Westcappell come within two shippes length to the point of the sand-hills, to wit, that Westcappell stand so much within the west point of the sand-hill, bring that also not further out, nor neerer to the point of the sand-hills, for els you should saile upon the Raen. When that Westcappell standeth so, and S. Anne (a flat steeple in Flanders to the westward of Sluce) standeth amongst the east sandhills of Casant, then goe northwest and by west out at the Doorloy. When that S. Anne commeth then to the westwardes of that foresaid sandhill, then commeth the castle of Sluce, under or behind that sand-hill, keepe that under there, or right to the east side of the foresaid sand-hills, and then goe out northwest and by west and you shall goe cleare of the Raen and the Raffes. If you bring Westcappell without the sandhills before that S. Anne come without the foresaid sandhills of Casant, then you shall be too farre to the northwardes, and too neer the Raffes. Or if you bring S. Anne without the sandhills of Casant, before Westcappell come to the end of the sand-hills, then you shall be too farre to the southwardes, & shall come against the Raen, but when you bring

WALCHEREN. DEEREN. Cafandt.

Pyfcaart vande
Gaten van Wielinge

Duyfche mylen 15 in een graadt
Spaenghe mylen 17½ in een graadt
En een Ey myle 20 in een graadt



Met Privilegie der Ed. H. H. M.
Heren Staten-generaal
voor thien jaren.

bring Westcappel to the point of the sand-hill, and S. Anne without the sand-hills of Casant one as soone as the other, then you are amid the channell of the Doorloy right in the fareway.

*For to find
the Door-
loy coming
in out of
the sea.*

For to find the Doorloy comming in out of the sea, you must run to the Raen by the lead, untill that West-cappel come within a mafts length neere to the Sconce, and faile so right in, or take the sounding of the Raen, and run alongst by it untill that S. Anne come to the foresaid eastsand-hill of Casant, then go in alongst s. e. and by e. and you shall soone be over the showldest, and find deeper water, but you must reckon well your tydes, for the flood falleth into the Doorloy first south (as also the after ebbe) afterwards s. s. e. and at last to the southwards. Therefore if you will goe in at the Doorloy with a fore-flood, you must goe at least e. s. e. or eis (if you should go in upon your direct course) you should lightly be carried against the Raen. Comming then out of the sea alongst by the Raen, untill that S. Anne be hidden amongst the sand-hills of Casant, then goe one s. e. untill that Westcappel come within the point of the sand-hills, and then run boldly right on with Flushing. In dark weather men may sound alongst by the Rasses; When that you keep the castle of Sluce to the eastwards of the foresaid sand-hill upon Casant then you cannot take hurt of the Raen, but when the Church of Sluce standeth to the west-side of the foresaid sandhills, then you are thwart of the showldest of the Raen,

The Splete.

FOR to faile from Flushing out at the Splete, you must goe on first (as is before said) w. n. w. untill that Westcappel come almost to the point of the sandhills, but not without it, or that the steeple of Middlebrough come to the Inner-sandhill, then goe w. s. w. and then you run out at the Splete, which is more then a great halfe league broad, and at low water upon the showldest foure fathome and a halfe deepe. Betwixt Soutland and Dyshoeck lieth a high sand-hill, which is at the east end somewhat steepe, called the Doorne-hill, to the eastwards of it lieth another sand-hill which is somewhat long, not altogether so high as the Doorne-hill with a clift or little dale in it, which doth (as it were) divide the long sand-hill in two sand-hills, the southermost is called the Inner sand-hill, because that to the southwards of it there are no more high sand-hills. When that the steeple of Middlebrough commeth over that inner sand-hill, or in that foresaid clift, and keepe that over it, or in it, then you run out at the Splete, and can take no hurt neither of the Poll nor the Raen.

Doornhill.

*Inner sand-
hill.*

*English
Poll. The
Raen.*

*Markes
of the Raen.*

The English Poll is steepe, but with easterly winds men may Borrow of it by the lead. The Raen is flat on the Inner side as well as on the out side, so that men may sound out alongst by it all the Splete when you cannot have sight of the foresaid markes in darke weather, and it is so broad, that men have an halfe houres worke for to faile thwart over it, but the English Poll is so narrow, that men may runne over it with foure or five casts of the lead. When that Aerdenburgh commeth without the foresaid sandhills of Casant, then you are past the dry Raen, but it lieth yet out to the westwards with a great flat, so farre to the westwardes, that whē Bridges commeth to the eastwards of Blanckenbrough in the Gallowesherds, that are high sandhills to the eastwards of Blanckenbrough, where in times past was wont a Gallows to stand, then you are past all the showlds, and may goe your course where you desire to be. Blanckenbrough hath a flat steeple somewhat higher (but not so thick) as Lisweghen.

The Ript.

From the end of the English Poll lieth a long ribbe (about a shot of a cast peece broad) to the westwardes, untill past Ostend, called the Ript, it is hard sand, and good anchor ground. When Blanckenbrough standeth southeast and by east from you there is upon the Ript at low water six fathome deepe, more to the eastwards, towards the English Poll it is showlder, but the farther to the westwards the deeper unto the outer banck thwart of Ostend.

A shot of a cast peece to the northwardes of that Ript it is deeper and soft ground. Also when you come towardes the south or southeast a shot of a cast peece over the Ript, it will be presently a halfe fathome deeper, and soft ground, that is then the channell of the Wielinghe. Therefore when you come out of the sea, and will faile in at the Splete, edge to the coast of Flanders, when you are (by your reckoning) past Ostend, and borrow to it by your lead, untill that you get hard ground, and showlder water, that is then for certaine that foresaid Ript: having found that in fixe, seven, or eight fathome, according as you shall be to the eastwards or the westwards, then edge off againe to the northwardes into the sea, untill it begin to showld, and be hard ground; keepe so the sounding of the Ript untill that you find againe deeper water and soft ground, runne in then eastnortheast, and edge now and then to the southwardes, towardes the north side of the foresaid Ript, untill that Bridges commeth to Lisweghē (being a flat and verie thick steeple) or that Blanckenbrough stand south from you, then you come thwart of the Raen into the Splete. Then bring the steeple of Middlebrough over the foresaid Inner sand-hill, betwixt Soutland & Dishoeck, and run in right with it, eastnortheast untill that the Castle of Sluce come to the eastwards of the foresaid east sandhills of Casant, faile then right on with Flushing, and so you shall goe cleare both of the Raen and the Polles. If it should happen in dark or misty weather, that you cannot see Middlebrough, then run in by your lead alongst by the northside of the Ript eastnortheast, untill that you find showlding and hard ground of the banck, and so you shall run in betwixt the Raen and the banck. The westend of the Raen is flat, which you may sound verie well. In the channell betwixt the banck, or English Poll, and the Raen it is soft ground on both sides, as well towardes the Raen as towardes the banke, it doth begin to showld, and to be hard ground. When Heyft, that is, a high sharp steeple commeth to the fire-beacon, thwart of that is the banck, or English Poll at the showldest, to the eastwardes of that, the banck waxeth deeper; Being come past the showldest, if you edge towardes the banck, you shall finde deeper water, and may runne over there at halfe flood with 18 foot, but it is not good to do it, for not to fail upon the French Poll, but keepe all alongst the sounding and hard ground of the banck, and shape your course a little more easterly for to avoid the Rasses, which lie thwart of Soutland, and are steepe. When you are come somewhat further in, goe then east on towardes Flushing, and you shall not come neere any showlds. Thwart through the Raen goeth a Slenck where remaineth at low water, not lesse then two fathome and a halfe water: for to find it comming in out of the sea, you must bring Aerdenburgh a little without the point of the sand-hills of Casant, or Westchappel in Flanders a little to the eastwards of Knock, faile then right with it, untill that you get deeper water, or that the steeple of Middlebrough come over the inner sand-hill, and then in alongst with it. Westchappel in Flanders is a short flat little steeple, with a little short blunt spire, or cap upon it, but Knock is a sharp steeple, not so high as Heyft.

The Wielinghe and Inner-wielinghe.

FOR to faile in at the Wielinghe comming in out of the sea, you must runne on to the coast of Flanders, (when you are past Ostend) untill you come in five fathome. Thwart of Blanckenbrough there was wont a few yeares past, to lye a banck or shoare of from the shoare, which men might faile within, comming from the westwardes: now there is nothing but a little flat, and Dobbelsand is also altogether cleane gone. Or else you must look out for Lisweghen a flat steeple, and the thickest thereabouts. When the steeples of Bridges, (being called the westwardes of Lisweghen, then are you yet to the Brugghelighen) stand a cables length to the westwardes of all the sands, polles; and banckes, keepe these steeples so standing, and runne on to the coast, untill you come over

me over the foresaid Ript, & that you finde againe soft ground, & more depth, untill you come in five fathome, go then northeast, and northeast and by east with a flood, or n.e. and northeast and by north with an ebbe, (reckon well your tydes, which runneth there most eastsoutheast somewhat foutherly, and westnorthwest somewhat northerly, and the tyde runneth but a little houre alongft the land) keepe the steeple of Wenduynen on or two ships lenghts without the Schonce of Blanckbrough, so long as you can see them, and still in five fathome; when that Heyft commeth then to Bridges and Westchappel to Knock, then are you right in the farewaie of the Wielinghe, the neerer that you are to the banck of the English Poll, the deeper water you shal find, except that you have the showlding of the banck it selfe. Bridges must come first to Heyft, or els you should be too far to seawards, or too neere to the English Poll; with a foreflood you may bring them both at once together, but not with a fore-eb. If you get then showlding, that is, of the English Poll, go from thence alongft the same course, through betwixt the English Poll & the French Poll, or Innerbanck, that is, a hard sand & steep; but the English Poll is thereabouts flat, which you may found. When as that the castle of Sluce commeth to S. Lambert (a high flat steeple upon Basant, to the northwards or to the eastwards of the Sluce) then you are past the French Poll, then east on right with Flushing, or els observe these marks following: Lifweghen must not come within Heyft, before the castle of Sluce come to the east sandhill of Casant, but remain without it, or els you should sail on against the Inner-banck, when as that the Castle commeth then to the sand-hill, goe then boldly northeast and by east, and eastnortheast, for to avoyd the French Poll, untill that the steeple of Flushing come to the northwards of the prison gate, then you get deeper water: goe then on east, & east and by south right with Flushing. There remaineth in the Wieling, as also in the Innerwieling at the lowest water, not lesse then foure fathom and a halfe water.

The Inner-wieling lieth in through betwixt the Innerbanck, or French Poll, and Casant. When you come from the westwards into the Wieling, and are come so farre, that West-cappell come to Knock, & will goe in at the Inner-wieling, then goe from thence east and by south on, and you shall espy the buy upon the point of the Paerdenmarckt, (that is, a sand that shooteth off from the east point of Sluce haven, and is very steepe) leave that buy on the starboard side, and keepe S. Lamberts steeple even without the east sandhills of Casant or Sluce haven, and goe on

northeast or somewhat more northerly alongft by the shore, for to avoyd the Krakesand, when as then the Castle of Sluce and S. Lamberts steeple come one in the other, then goe on east right with Flushing.

Of the tydes, and course of the streames.

BEfore the Wielings a south and by west, and a southsouthwest Moone, maketh the highest water.

At Flushing and Rammekens a southsouthwest Moone. At Westcappel on the land of Walcheren, a south and north Moone maketh high water. When the water is a halfe houre fallen, then the tyde beginneth to fall out there, and when it is flowen a halfe houre, it beginneth to fall in: but before the Botkill it beginneth to goe there first an houre before the lowest water, but it falleth long at sea. In the Splete, and over the Showlds lying thereabouts, the tyde turneth about against the Sunne, and at last falleth in at the channells. A south & north Moone maketh there the highest water. The fore-flood falleth over the showlds there towards the land. When the Moone is about eastsoutheast, or that the water be about two houres flowen, then it beginneth to turne towards the south, first southsouthwest, and then past the south towards the east, untill that the Moon be southsoutheast, and then the flood falleth to the eastwards. When Blanckenbrough standeth about southeast and by east from you, from thence to the eastwards the tyde turneth about against the Sun, but from thence to the westwards, you shall not find the tydes to turne about.

Against Zealand in the fare-way a third part of the flood falleth towards the land, and afterwards east and by north. Men may see Zealand from the Poop in 16 fathom.

Courses and distances

FROM Flushing to Blanckenbrough nearest westsouthwest, 9 leagues
From Blanckenbrough to Ostend f.w. & by w. 2 leagues
From Flushing to the north Forland, west somewhat southerly, 25 leagues
From the Wielings to Dover westsouthwest, 26 leagues
From the Wielings to Leystaffe or Yarmouth, northwest & northwest and by west 38 or 40 leagues

Heights

Flushing, Rammekens, and the south coast of Walcheren ly neere in 51 degrees and a halfe.

How these lands doe shew themselves at sea.



Thus sheweth Walcheren when you are in the Doorloy, or before the Splete.

S. Lambert. Sluce. Knock. Hey. Lifweghen. Blanckenbrough.



Thus sheweth the coast of Flanders from Blanckenbrough eastwards, when you saile in or out at the Wielings.

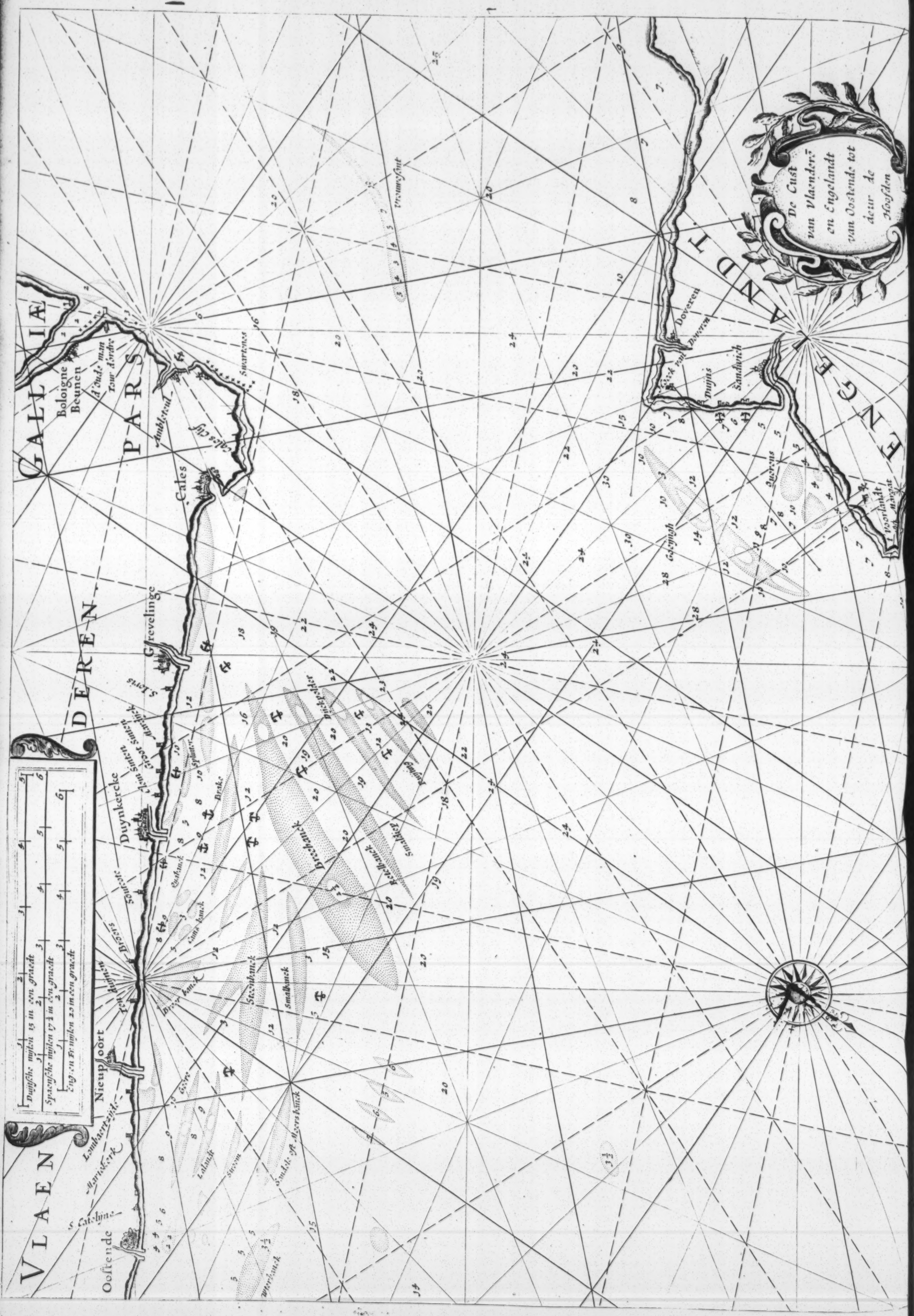
C H A P. V I.

The coast of Flanders from Sluce through the Heads, of the Strait between Callice and Dover.



Flanders is a land ful of sand-hills and hommockes, with many steeples alongft the coast, lying from the haven of Sluce unto Callice, most westsouthwest, and eastnortheast. The first steeple to the westwards of Sluce is S. Anne a flat steeple, next is Knock a sharpe steeple, & then Westchappel a little short flat steeple, with a blunt cap upon it. Heyft to the westwards of them is a long sharpe

steeple higher then Knock. Betwixt Heyft & Blanckenbrough, lieth Lifweghen somewhat within the land, that is a flat steeple, & the thickest of all the steeples thereabouts. Blanckenbrough is also a flat steeple higher then Lifweghen, but not so thick. Within the land from Blanckenbrough, standeth Bridges, two thick, sharpe steeples upon one Church; to the westward of Blanckenbrough a great halfe league, lieth Wenduynen a sharpe steeple. Betwixt Wenduynen and Blanckenbrough standeth an other little steeple called Iohn Davids steeple. Ostend lieth a great league to the westwards of Wackerbout. A halfe league to the westwards of Ostend, lieth S. Catharines, and a league to the westwards of it is Middlekerck, being



Duitsche mijlen 15 in een graede 3 4 5 6
Spaensche mijlen 17 1/2 in een graede 3 4 5 6
Eng. en Fr. mijlen 20 in een graede 3 4 5 6

De Cust
van Vlaenderen
en Engelandt
van Oostende tot
deur de
Hoofden

being a high thick flat steeple. From Middlekerck to Newport it is two leagues, there is a flat steeple, with a little sharpe steeple. A little to the eastwards of Newport lieth our Lady of Lombardy, a high flat steeple.

From Newport to Broers is it two leagues, and from Broers to Dunkerck three leagues. The Soutkoten is a league to the eastwards of Dunkerck. Dunkerck hath a high flat steeple, with a little sharpe steeple. From Dunkerck to Gravelin are three leagues, betwixt them stand these steeples, first little Sinten a little sharp steeple, great Sinten a thick flat steeple, Maerdyck a thick flat steeple, & S. Georges a high sharpe steeple. Graveling hath no steeples, but there stand two milles, one on the Easter gate, & the other on the west end of the town. From Graveling to Callice are three leagues. Callice hath many sharpe steeples, where of one is higher then all the rest, & betwixt both ly these villages most without steeples. First Hooghenpryfe & Dafen, two flat steeples; more Valdam a flat Church with a little spire upon the middest of it, that is all the knowledge of Flanders. The coast of Flanders betwixt Callice and Blanckenbrough, is four and twenty leagues long, or as some say, one and twenty leagues & Blanckenbrough from Flushing nine leagues. So that Flushing is from Callice, at the least 30 leagues, or as some say, three and thirty leagues at the most.

That which is here said of the steeples & leagues alongst the coast of Flanders, is very serviceable & needfull as well for that which is before described of the Wielings, as also for the sayling into the havens of Flanders, but especially for the knowledge of the Flemish banckes.

For to saile into Ostend, you must run close to the eastwards of the towne into the haven called the Gueule, on the east point of the haven lieth a head, whereupon standeth a beakon, you must run close in by that head, there it is deepest. From the west side, to wit, towards the towne, shooteth off a little flat, therefore you must avoyd that side a shippes lenght or two, at low water & a common tyde remaineth in this havens mouth six foot, and at high water there is two & twenty foot water. A little within the haven you may ancker where you will, & at low water you may ly there with a great shippe a float.

Newport is a tyde-haven which falleth altogether dry at low water, & at high water, & a common tyde there is thirteen foot water, close before the havens mouth is a banck, which lieth from the eastwards of the haven of Newport over to the westwards, thwart before the havens mouth, & at halfe flood lieth dry, and at high water there commeth no more upon it then eight foot water. He that wil go into Newport, must goe in from the westwards betwixt the foresaid banck & the land, & sayle in to the southwards of the banck so long untill that the innermost beacon come even through, or to the eastwards of the outermost, & then run in so right by them, and in alongst amidst the channell betwixt the heads. Betwixt the banck and the land it is on both sides flat rising ground, so that you may found the shoares on both sides, but one the north side the banck is somewhat steepe, is it three fathom deepe close alongst by it. Within the havens mouth it is set on both sides of the deepe with beacons, where you must runne through betwixt untill you come before the towne, which lieth about a cannon shot from the sea side. There is fired in the night upon the two great beacons, but not longer then from halfe flood to halfe ebbe.

Frō Newport to Dunkerck alongst by the shoare through within the bancks, it is cleane without any fowle ground or bancks, & at low water fiftē foot deep, the neerer the shoare the deeper. Thwart of the Cloyster Ten Duynē betwixt it & Broers bank, it is narrowest, which lieth not farre from the shoare, thwart of it you must goe close alongst by the shoare.

The Quade bāck runneth off to the eastwards of the head of Dunkerck, at least two leagues to the westwards ending thwart of the heads of Dunkerck. To the eastwards of the easterhead of Dunkerck men may ancker behind this banck, and ly sheltred for a northwest, n. and n. e. wind, it is two fathom deepe there at low water, but in the comming in, it is shoulder. Before the havens mouth of Dunkerck it is nine

& ten fathom deepe, & to the westwards of the wester head of Dunkerck, 6, 7, & 8 fathom, from thence men may runne over the Small banck in 3 fathom, & come against the Broad banck. This Small banck lieth right thwart before the haven of Dunkerck, to wit, betwixt Dunkerck, and the Broad banck.

For to saile into Dunkerck, you must bring the fires within a capstone barres length one to the other, to wit, the innermost so much to the eastwards of the outermost, keep them so, and runne in then close alongst by the easter-head, the wester head lieth somewhat further off into the sea then the other, thwart of it lieth a sandplate with some pales, therefore you must avoid it, & runne in close alongst by the easter head. It is a narrowe haven, & at high water & a common tyde there commeth no more then twelve foot water. In the night they doe fire there as at Newport, from halfe flood to halfe ebbe, and the lowest fire-beacon standeth next unto the sea.

From the wester head of Dunkerck runneth off a banck about two leagues lōg, called the Splinter, which falleth dry at low water at many places, men may saile in by the shoare behind this banck from the westwards almost to the wester head of Dunkerck, and there may come to an ancker in five, six, seven, and eight fathom. About halfe a league from the foresayd wester head, there runneth a Slenck through the foresayd banck, where little shippes may goe through at high water.

Graveling is also a tyde-haven, where men must goe in at high water, there stand two beacous, which you must keepe one by the other, and saile so in betwixt the heads, on the west side runneth off a little riffe, which you must avoyd. When you come from the eastwards alongst the coast running through Wolbrech sound, at the end of the Brakes, (that are the bancks before Dunkerck, & from thence westwards) the you come against the west point of the foresayd little riffe or outland of Graveling, which lieth a good ways off into the sea, to the eastwards of it men run into the haven of Graveling by night right in with the fires.

To the westwards of the haven of Graveling lieth a bank or flat alongst the shoare, lying a good wayes off from the land to seawards, almost as farre to the westwards as Callice, called the Newland, men may runne alongst by it, or over it in five, four, and three fathom, according as men will.

The haven of Callice falleth every tyde altogether dry, & at high water with a common tyde there is no lesse then 3 fathom water. For to saile in there you must keepe the mill (standing on the east corner of the towne) right over the easter head, & runne in so close alongst by the easter head, and let the castle ly on the west side of you, from the wester head runneth off a little riffe, therefore you must avoyd it. When you are come in within the wester head, you must go up to the westwards into Paradise, & there ly dry at low water. By night when the tyde serveth, there stand two fires, you must runne in right with them. It is not good to come into this haven before high water, because of the exceeding strong tyde that runneth in there with the flood, for to avoyd the anckers of the shippes, which ly there within. It is there within dangerous & bad lying, especially with a northerly wind, which bloweth there open in.

Thwart off from the wester head of Callice lieth a banck of two fathom, betwixt the Head or Meyland, and the same banck men may run through in three fathom at halfe flood, the banck is two fathom deepe. Vnder Callice cliffe at the east end, men may ancker in ten fathom, but at the west end lieth a rock under water, a howe shot from the land. Callice Cliffe lieth betwixt Callice and Blacknesse.

Of the Flemish banckes.

West from Westcappell, and n. w. from Ostend, about nine leagues without the coast of Flanders, lieth a little plate, whereupon at low water, is no more then two and twenty foot water, in fowle weather the sea breaketh very much upon it.

The Tricx. About two leagues from Ostend without the land lieth the Tricx, or outerbanck, upon it there is no more then fifteen or sixteen foot water. When S. Katherines steeple commeth against Ostend, then you come on against this banck: betwixt this banck and the Heads of Ostend, lieth another banck of three fathom water.

The Geer. Betwixt Ostend & Newport ly foure banks, all which foure begin about thwart of Ostend, the two neereft to the lands end thwart of Newport. The other ly all alongft the land almost to Dunkerck: the first and neereft to the land is called the Geere, betwixt that and the land goeth a channell through of eight, nine, and ten fathom.

Laland. The second called Laland, endeth also against Newport, betwixt these two goeth a channell through of eight and nine fathom.

Stroom. The third are two banckes one to the other, the eastermost ending halfe wayes: Laland is called Stroom, the westermofst ending thwart of Dunkerck, is called the Stonnebanck, which hath on the east side a hooke, which lieth to the eastwards, running to nothing almost against Newport: this banck is three or foure fathom, and upon the east end five and fixe fathom.

Sandele Oudmoers banck Calbanck. The fourth is also in two bancks, the eastermost is called Sandele, or Oudermoers banck, and the westermofst Calbanck, of some called also Small-banck, which lieth alongft by the Broad-banck: but that outer end lieth at least two great leagues off.

The shippes that will goe before Dunkerck, & cannot get alongft by Flanders, do runne about without these bancks, untill they come against Broad-banck, and then run in alongft by it in five or fixe fathom. The channell is fifteen fathom deepe, and every one of these foure bancks hath a dry Polder. When two steeples (that are somewhat flat to the southwards of Newport) stand a handspikes length afunder then are you thwart of these foure bancks heare before mentioned, which are not deeper at low water then one fathom, and at Spring tydes fall almost dry.

Betwixt all these banckes you may ancker in nine, ten, eleven, and also in twelve fathom, you may runne over them in foure fathom, but when you are to the westwards of them, you shall finde it deeper, to wit, eight, nine and ten fathom.

Broers-banck. The Broers banck is three cornerd, and lieth close by the land thwart of Broers and the Cloyster Ten Duynen, and lieth off from the shoare about westnorthwest a league into the sea, when the Cloyster Ten Duynen, or the Broers lieth south from you, then you are at the innermost part of the Broers bancke; you may runne through betwixt the land & this banck, in foure fathom at low water, but men doe runne commonly about to the westwards of it, when they faile through within the banckes, alongft the coast of Flanders.

Cams-banck. A little to the westwards of Broers banck lieth the Cams banck, which is three fathom deepe, and lieth in many Rasses, you may runne through betwixt the land & this banck also in eight, nine, and ten fathom, and also may ride there for all winds. By the land, betwixt this banck and Broers banck, it is five fathom deepe. When you runne through betwixt this banck and the land, then you come alongft by the Quade banck untill you come before the haven of Dunkerck. When you are a good wayes past the head of Dunkerck, about southwest from the Splinter, then you runne over a showld of two fathom, called Wilbaert sound; being over it you shall have againe ten, eleven, and twelve fathom. When Borburger steeple commeth in the valley of the sandhill, then you are thwart of this banck, by these markes you may faile through these banckes northnorthwest into the sea, and come against the taile of the Broad-banck in four fathom. When as that you doe edge againe somewhat towards the land in twelve, thirteen or fifteen fathom; then you may faile through betwixt the Broad and the Small banck, on eastnortheast, or east and by north untill you be past the Cloyster Ten Duynen, or the Broers banck, which lieth off from the

Cloyster about a league in to the sea. To the eastwards past this banck it beginneth to be showld water against Newport four or five fathom, being past Newport, you must edge towards the land, in eight or nine fathom, keeping close to the land, and then you shall runne through betwixt the land and the Geere, (which lieth alongft towards Ostend.) When you come against Ostend, then you are cleare of the banckes, and then you may runne into the sea for to goe into the Wielings.

There ly yet five long bancks alongft Flanders When Graveling is southeast from you, then you are thwart of the south end of these banckes: and when Newport is southeast from you, then you are thwart of the north end of them, they, are very long, and betwixt each goeth a wyde channell through of eight, nine, twelve, fifteen, sixteen, eighteen, nineteen, and twenty fathom deepe, each of a severall depth.

The outermost or westermofst banck called the Cliffe, lieth from Callice cliffe northnortheast about four leagues and a halfe, and is three fathom and a halfe deepe: betwixt this & the other goeth a wyde channell through of three and twenty and four and twenty fathom deepe.

The second called the Ruyting, lieth from Callice cliffe northeast and by north about four leagues, and is there five or fixe fathom deepe, but upon the south end of it is a Polder of a fathom and a halfe. When the south end of Winocxberghen commeth betwixt the two flat steeples to the westwards of Dunkerck, then are you thwart of this Polder.

There stand three or four milles to the eastwards of Dunkerck, when the outermost commeth over the east end of the towne, that is also a good mark of this Polder, or showld, and then the steeple of Dunkerck shall bee from you southeast five leagues.

Betwixt this and the third goeth also a channell through of 12 and 13 fathom.

The third, called the Dyke, lieth from Callice Cliffe northeast, and is deepe four and five fathom, upon the south and north end of this banck are Polders, the southermofst is deepe one fathom, and lieth also upon the markes of Winocxberghē about northwest somewhat westerly from Dunkerck, and is called the Polder of the Dyke, or Dyke-polder, the other Polder or showld of this banck is about four fathom and two foot deepe, & lieth northwest from the Cloyster Ten Duynen. The bancks are very dangerous; for the Ruyting lieth almost in the fareway, & at low water they have no more then 2 fathom depth.

The fourth banck, called Kettell-banck, lieth from Callice cliffe northeast & by east and is deepe, three, four, five, and six fathom. Vpon the southend is a showld of one fathom water at low water, at Spring tydes these Polders fall dry. Alongft by this goeth also a channell through of nineteen & twenty fathom.

To the eastwards of the Kettel-banck, to wit, betwixt that & the Broad-banck, goeth through a great channel of nineteene and twenty fathom.

In all the channells betwixt the foresaid banks, men may turne to windwards every where from one banck to the other and ancker betwixt the bancks where they will.

The south end of the Broad-banck lieth from Callice ciffe eastnortheast, & hath one showld upon the south end of one fathom and a halfe, is throughout three and four fathom deepe.

The northend is deepe six, seven, & eight fathom, and lieth so farre to the northwards, untill Newport be Northwest from you, or the Cloyster Ten Duynen be northnorthwest five or fixe leagues from you.

The coast of Engeland from Dover to, the north Forland.

Betwixt Callice & Dover amidst in the fareway, (or somewhat neerer the French side then the English) lieth a narrow banck of four leagues long, lying about n. n. e. & south-

southsouthwest alongst the land of Blacknesse, being called the Vaen, and by the Dutchmen called Vrow-sand, of five, six, seven & eight fathom depth, and runneth to the southwards, towards the land of Bulleyn. West & by south from Callice cliffe, and south and south and by east from Dover, is the showlest of it, at low water not deeper then sixteen or seventeen foot. On both sides of this banck, as well alongst to the eastwards as to the westwards of it, is 20, 22, 23, and 24 fathom deepe. Men may ancker before Dover for a north and northwest wind, right against the Castle in ten fathom is the best road and clean ground. For to sail into the Downes from the southwards, you must runne about by the south Forland, within two cables lengths alongst by the land, & ancker thwart of the middlemost Cattle in seven or eight fathom.

The southermost point of Goodding, & the south Forland ly northeast and southwest asunder.

Betwixt Goodding and the Valley in the land of the north Forland, called Ramsgat, ly two showlds, where of the westermost is called the Quernes, and the eastermost the Brakes.

For to saile from Dover (through within the Goodding, betwixt the Goodding and the Brakes) to the north Forland, you must goe on north & by east so long untill that the mill upon the north Forland come to the west side of the Valley in the north Forland, then goe yet north and by east, and northnortheast, untill that the little steeple upon the north Forland come to the east side of the foresaid valley, then you shall bee to the northwardes of the Brakes, and then the little flat steeple upon south Forland commeth to or right over the third white Chalckhill to the northwardes of the south Forland, that is a direct longst marke, for to saile through betwixt the Brakes and Goodding, as well when you come from the northwardes, as from the southwardes.

For to saile through within the Goodding from the northwardes, you must not come neerer the Brakes then in seven fathome, and set the south Forland southsouthwest from you, and saile then so right with it, and then you shall runne alongst the best deepe. When that the flat steeple upon the north Forland standeth in Ramsgat or the Valley, then you shall be thwart of the Brakes, and when the mill commeth in Ramsgat, you shall be to the southwardes of the Brakes.

When you ly in the Downes, and that the inner point of the cliffe of the south Forland ly southsouthwest from you, then the Quernes ly north and by east from you, and the north end of Goodding northeast from you.

The north end of Goodding, and the point of the north Forland, ly southeast and by east, and northwest and by west a league and a halfe asunder.

For to come from the northwardes into the Downes through betwixt the Brakes and the Quernes: there standeth a Church upon the high land of the south Forland, to the northwardes of it, which is a flat steeple, and the church somewhat great of body, and there are three Castles upon the strand of the Downes, you must bring the foresaid Church with the flat steeple right in the midst betwixt the two southermost castles, and then you are in the fare-way in the middle of the channell, and that will serve for a leading mark to run through betwixt the Brakes and the Quernes, & the course lieth through southsouthwest. If the winde bee southerly, that you must turn to windwardes through, runne not further over to the eastwards then that the foresaid Church come within two shippes lengths of the southermost castle, for if you should bring them neerer, or together, then you should runne upon the Brake, and being east about, runne not further over to the westwardes then that the foresaid church come within two shippes lengths of the middlemost castle of the three, for if you should bring the neerer, or together you should runne upon the Quernes, and these markes will serve to turne to windwardes through betwixt the Brakes & Quernes either fro the northwardes or the southwardes. The Brake is steepe, being 5 fathome close alongst by the side of it,

and in the middle of the channell is but 15 foot at low water, so that is deeper by the side of the Brake, then in the middle of the channell. As you turne to windwardes, and runne over to the eastwards towards the Brake, as soone as you come to haue five fathome, you must cast about, or els you should be against the Brake: the Querne is flat, but neverthelesse as soone as you finde it shoulde (in running over to the westwardes towards the Querne) then 15 foot, you must cast about againe and so turn through. About halfe a league from the north end of the Goodding to the southwardes, lieth off a flat taile or spit of sand to the westwardes from the Goodding, a great musket shot off, and falleth dry a good waies off at low water, which maketh the channell there betwixt the Goodding and the Brake verie narrowe, the thwart markes of this taile of sand are these: up within the land, a little to the southwardes of Ramsgate, stand three or foure high trees together, when these trees doe come right over the southermost end of the cliffe that lieth also a little to the southwardes of Ramsgate, then you are thwart of this foresaid taile of sand, as soone as you shall be past it, then you shall have more roome to turne to windwardes, and may runne further over to the Goodding.

For to saile from Dover without the Goodding to the north Forland, you must keepe the point to the westwardes of Dover without the south Forland, and goe on northeast untill that the north Forland be northwest and by west from you, then you may boldly runne to the north Forland, and ancker before Margate, or where that you shall thinck it best, but thwart of the steeple, where the mill standeth by, is the best road. Or when the point of the north Forland lieth southsouthwest and southwest and by south from you, there is also good riding in eight or nine fathome. Betwixt Margate & the Reculvers, men may ancker everie where in fixe or seven fathome at halfe flood.

Betwixt the Quernes and north Forland men may also run through to Sandwich, there runs off a little stone-banck from the shoare, called the Fourefoot, betwixt that and the Quernes is it at halfe flood two fathome deepe. The Quernes are lately growne much lesse, and shifted, so that the north end of them is almost gone.

Of the tydes and course of the Streames.

Alongst the coast of Flanders on the land, a south and north moone maketh full sea.

In the farewaie without the Flemish banckes in the sea, a southwest moone maketh high water.

In the midst betwixt the heads a southwest Moone.

At Dover a south and north Moone.

In the Downes a southsouthwest Moone.

At the north Forland a south and north Moone.

Alongst the Flemish backes the fore-flood falleth over the bancks toward the land, about the third part of the tyd afterwards along the land, but the after-flood falleth to the northwardes alongst the sea in the right fare-waie.

When the flood beginneth to go there thwart off at sea, then it is already halfe flood on the land, and the water flowen halfe waies, so that men may goe into all the havens on the Flemish coast with 5 or 6 foot water.

In the midst through the heads, the flood falleth n. e. & by e. and the ebbe s. w. and by w.

From Dover to the north Forland the tyde falleth through within the Goodding north and south over the Brakes and Quernes.

Of the depth.

In the right farewaie betwixt the Mardeepe and the Heads, is it 23 and 24 fathome deepe. A little without the Flemish banckes 18, 19, 20 fathome, but neere Goodding or about the north Forland, it is 26, 28, and also 30 fathome deepe, the neerer Goodding the deeper water.

Being thwart of Goodding in 28 or 29 fathome, you shall not bee two shots of a cast peece from it.

For

Thwart
markes off
a taile of
sand, lying
off from the
Goodding.

For to run
about a sea-
board of
the Good-
ding.

For to saile out of the Marfdeep towards the Head, goe not on otherwise then southwest, and southwest and by south, (but you must bee very carefull to take heed of the tydes) when you shall reckon to have sailed 40 or 46 leagues, then edge over to the Flemmish bankes, untill you come in twenty or eighteen fathome, when that you are sure of these grounds, then goe on southwest, and at length southwest and by west, and you shall come in the middelt betwixt the heads of Callice and Dover.

Flanders you may see from the Poop in sixteene fathome, and then you are within the point of the Flemmish bankes.

Callice cliffe and the south Forland, or the point of Dover, you may see when you are before them in foure and twenty fathome.

Course and distances.

From Blanckenbrough to Ostend southwest and by west	2 leagues.
From Ostend to Newport westsouthwest	3 leagues.
From Newport to Dunker westsouthwest	5 leagues.
From Dunker to Graveling westsouthwest	4 leagues.
From Graveling tot Callice westsouthwest	4 leagues.
From Callice to Callice Cliffe s. w. and by w.	1 leagues.
From the Heads of Callice and Dover to the Riffe of Iutland northnortheast	120 leagues.
From Callice Cliffe to the Naze in Norway, northeast and by north	153 leagues.

Heights.

The Heads and Dover ly in 31 degrees, 12 minutes.

How these lands doe shew themselves at sea.



Thus sheweth the coast of Flanders betwixt Newport and Callice when you saile alongst by it.



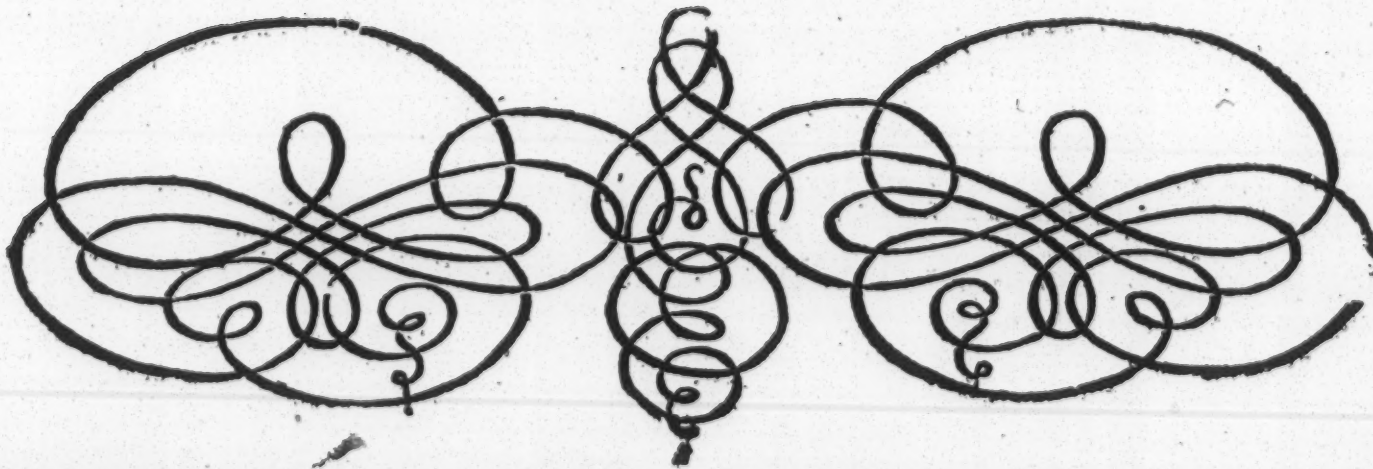
Thus sheweth Dover when you saile to the westwards of the Vaen, or Vrow sand through the Heads.



Thus sheweth the coast of Flanders betwixt Ostend and Newport.

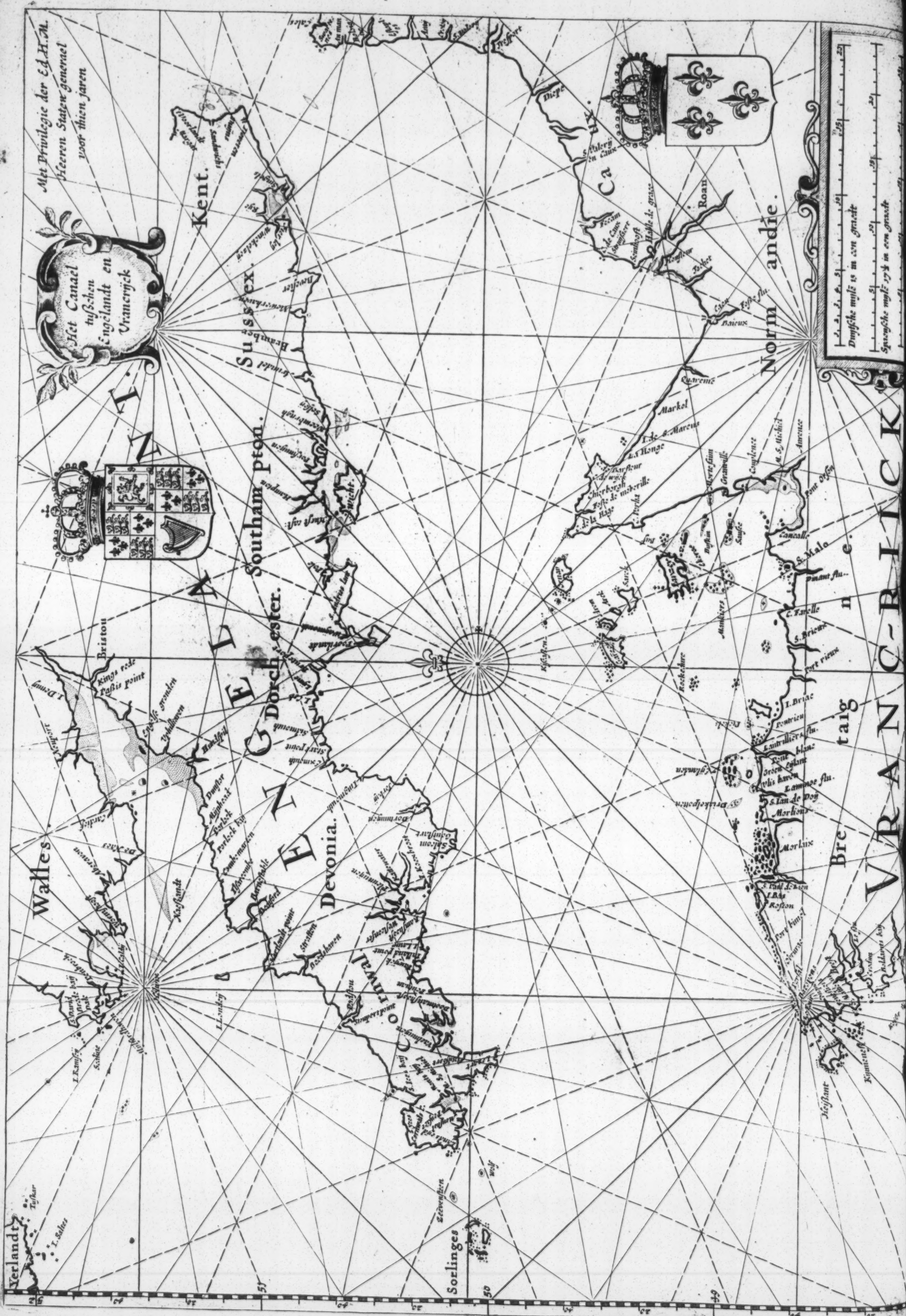
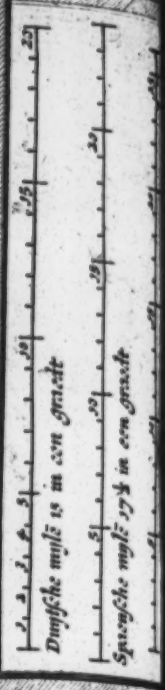
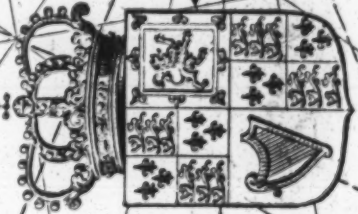


When you run from the Downes towards the north Forland, then the land sheweth it selfe thus.



The third part
S E C O N D B O O K E
of the
S E A - B E A C O N
of the Westernne and Southerne
N A V I G A T I O N,
Containing
THE DESCRIPTION OF THE
Seacoasts of France, from Callice unto Vshant.
AND OF ENGLAND,
From Dover about Englands end, to the point of S. Davids in Wales.

Mit Privilegie der Ed.H.M.
Heren Staten generael
voor thien jaren



Handwritten notes or signatures at the bottom of the page.

THE SECOND BOOKE of the WESTERNE NAVIGATION,

Conteyning the Description of the Coasts of France from Callice to
Vshant, and of England from Dover about the Lands end of
England unto the point of S. Davids in Wales.

C H A P. I.

*The Coasts of Picardy, and Caux, from Callice to the
River of Roan.*



ABout a great league to the westwards of Callice cliffe lieth Blacknesse, a fowle out-point, thwart of it ly many rocks alongst the shoar. From Blacknesse to the River of Bullen, lieth the coast south and by east three leagues; a league to the southwardes of the Nesfe, the land falleth somewhat in with a faire sandy Bay. In this bay lieth a Fisher village on the coast, thwart of it in the sandy bay is a very good road for easterly windes, in five, sixe, tenne, fifteene and sixteene fathome, according as you will ly farre from the shoare. For to ancker there, you must bring the steeple of the village over the middest of the houses. This place is called S. Johns road. A little to the northwardes of that foresaid Fishers village, stands a mill with some houses, from thence to the northwardes you may not ancker, for there the ground is fowle and stony. To the southwardes of the Road towards the River of Bullen, ly also some little rocks alongst the coast, which you must not come very neere to.

Vpon the north point of the River of Bullen standeth a high thick Tower called *la Tour d'Ordre*, by sea men the Oldman, a speciall marck for to know the River by. About an English mile to the northwardes of this Tower, a little mile from the shoare, lieth a little suncken rock under water, where a Huy or smack may not goe over.

Vpon the south point of the River of Bullen standeth a stone wall, and upon it a great Beacon of a mast, thwart of it from the south point lieth off a little riffe or showld, that you must shun, and runne close aboard alongst by the Head, which lieth at the north point, and hath been there lately made. When you are come within this Head, you must presently let fall your ancker & ride there; It is a tyde haven, where men must goe in at high water, and at low water ly dry upon the chindle. Without, before the River, lieth a banck, men were wont from the southwardes to run in over it in two fathome, and from the northwardes in three fathome, but it is now to the southwardes deeper through the scouring of the water alongst the foresaid Head, which is made at the north point.

From the Oldman, or the River of Bullen to Somme is the cours south about eleven leagues, between them ly also two other rivers, Cauche and Autii, upon the first ly Eastaples and Monstreu, there you must goe in amid channell at the highest water; within, it falleth altogether dry at low water.

Men may faile into the Somme, through two channells, from the East point called the East Downe, lieth of a sand thwart before the channell; to the westwardes of that riffe lieth also an other great banck, between them goeth in the Easter channell. For to faile in there, bring S. Valery a cables length to the westwardes of the west point of the river, called the Oordell, and runne in thereupon, untill you come

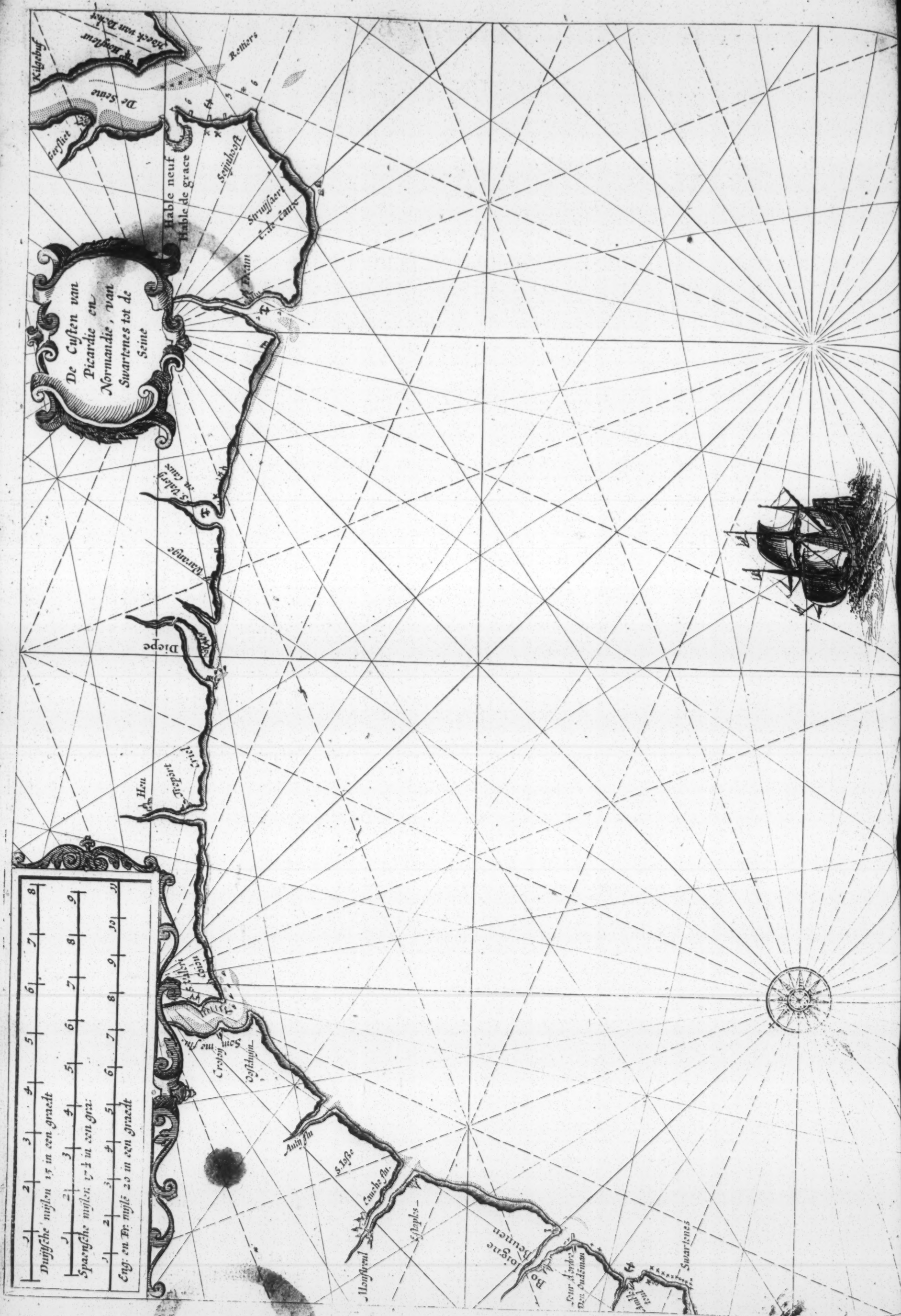
to the land at that foresaid west point; & from thence close alongst by it, or as soon as you get againe deeper water over the banck, then up eastward towards the Beacons. From the point of the Oordell lieth off to the northwards a little riffe, upon the end of it lieth a buy which you must leave on the starboard side, and run in close about to the northward of it. From the point of the Oordell upwardes, it is set all alongst with beacons, you must run alongst close by them, untill you come within the point of S. Valery, where you must ancker, and ly every tyde dry. The sands there within doe shift so often, that they are not to be described for alwaies.

For to faile into the wester channell, comming from the east or the north; you must runne alongst by the banckes in fixe or seven fathome, and not neerer they are so steepe, that a ship fitting fast against them with the fore-ship, at the stern hath three fathome. Comming towards the land at the end of the banckes, you shall finde a buy. Or els if you come from the west, and bring Crotoy a cables length within the Oordell, and faile so right in, you shall finde the foresaid outermost buy. Besides this, there ly three other buyes, whereof that foresaid buy on the point of the Oordell is the fourth, and the innermost: you must leave them all on the starboard side towards the land, and runne in alongst by them to the northwards of them.

These channells & sands there within (all untill past S. Valery) fall at low water altogether dry, the buyes also fall dry, that men may goe by them, at halfe flood with an ordinary tyde, there is no more then two fathom water, it is not good to goe in there before that two third parts of the flood bee spent. With an ordinary tyde it floweth there five and sixe fathom, but with a spring tyde seven fathom up and downe. At high water and spring tyde, a man may goe over all the bancks and sands with eight or tenne foot water: five leagues upwards lieth Abbeville.

Thwart of the Somme, it is farre off into the sea showld water, five, sixe, seven, eight, nine and tenne fathome, three or four leagues of into sea: he that commeth from the west, and findeth himselfe in darke and misty weather to bee in such showlding, may be well assured, not to be farre from the Somme. From the Oldman to Diepe the cours is southsouthwest sixteen leagues, but from the Somme to Diepe southsouthwest and by west eight or nine leagues. About halfe waies between the Somme and Diepe, lieth the river of Heu, within it on the north side lieth Tresport, being also a tyde haven, where men must goe in at high water, and at lowe water ly dry.

At the east side of the haven Diep, lieth a rane of rockes, and from it lieth a little riffe of chindle towards the north, or the west; to the southwardes of this riffe, goeth in the channell, about southeast in, it is verie narrow, and a short in-let, therein ly three buyes in the middest of the deepe, not above a stones cast one from the other, men may run in on both sides of them; comming to the end of the buyes, they must keepe the middle of the channell, and run in between the heads, untill they come within the towne, and there make fast with a cable on the shoare. Men may not



faile in there before halfe flood, but not at halfe ebbe; at low water it falleth altogether dry, but within at the towne men may ride afloat, at high water there commeth three fathome, or at the highest not more then three fathome and a halfe water, there come out alwaies Pilots to bring shippes in.

From Diep to S. Valery in Caux, it is westsouthwest foure leagues, that is also a tyde haven, where you must goe in with high water, it is a narrow channell, where you goe in between two Heads, there is neither sand nor bancke before it that can hurt you: being come in, you may let your ancker fall, and make you fast with a cable on the shoare. He that hath neither cable nor ancker, may (being come there within) faile his ship on against the shoare in the chindle, and so save his ship and goods without damage.

From S. Valery to Fecam it is westsouthwest foure leagues, that is a deepe tyde haven, there stayeth at low water little lesse then two fathome water. At the east side of the havens mouth lieth a banck or plate, men may with small shippes faile in through betwixt it and the land, and so run in, founding, borrowing in eight or nine foot alongst by the east shoare, which is flat. For to faile in to the westwardes of the plate, you must keepe the tower of Fecam without the land; or without the west point of the haven, and then it shall be southsoutheast from you, runne then upon that marck into the haven, and then the foresaid sand shall remaine on the larboard side of you, and at halfe flood you shall have in the havens mouth two fathome water, being come in before the towne, you may ancker there by the wester shoare in three fathome.

From Fecam to Struyfaert it is westsouthwest three little leagues. Without the point of Struyfaert ly two high sharp rockes. From thence to Seynhead it is south and south and by west two leagues and a halfe.

About northwest from Seynhead lieth a banck, upon which at low water remaineth no more then two fathome and a halfe water: when the towne of New-haven commeth without Seynhead, then are you thwart of the banck: for to avoid it, runne in close aboard the Seynhead, alongst untill you come within the first mill, there let fall your ancker in 6 fathom, & stay for a Pilot to bring you into the haven.

For to faile into the river of Roan, comming from the north or the east, you must runne close aboard the land to the northwardes of Seynhead, & alongst by it so long, untill the south side of the river com unto the point of Seynhead, then run in with it, untill the land to the eastwards of New-haven come without New-haven, faile then unto the haven of New-haven. Or els, if you will goe without, about the banck or the Rettires, then edge over to the westwards so far from the land, untill the river come open, faile then towards the point of Tochet, and runne in upon your lead by it, there is at high water three fathome, and at low water no more then one fathome. The Rettires is a stony banck lying in the midst of the river of Seine; lying over towards the point of Honfleur, at low water it falleth at some places dry, at halfe flood it is to the southwards three fathome, but to the northwardes two fathome deepe. When the land of Caen is without the point of Seinhead, and you faile then with it, south on, then you run to the westwardes of it, or alongst without it. Or els if you keepe Struyfaert a handspikes length without the land of Seinhead, then you runne also without it. When the Easter gate of New-haven commeth over the Easter head, and the Easter mill, and faile then so on, keeping them so, then you runne in right to the northwardes of the Rettires, and also you can take no hurt of the banck that lieth towards Seinhead. At Habbell or New-haven men must goe in at high water, and within, ly every tyde dry.

The river of Seine must be sailed into upon the tyde, when the most, or the strongest of the flood is spent, then you may faile alongst by the land upon your lead, untill you may see in open into the river of New-haven, when then the Souther castle commeth over the Easter head, and the mill; runne then right in upon it, but it is best to ancker half waies betwixt the Castle and Seynhead, and there to stay

for a Pilot: If there come none off, then faile from thence right with the castle that standeth upon the head, there it is deepest water.

To faile from New-haven upwards, towards Roan, is not well to bee done without a Pilot, you must goe with the tyde through the first travaille or Banckes, which ly from New-haven to Honfleur southeast alongst by the southerland, and from thence alongst the north side of the river to Quillebeuf, being come there, you are through the first travaillie. You must also be well advised, and take good heed for the strong Spring by the Normans called *La Barre*, which every tyde commeth on so strong with the flood, that anckers and cables have enough to doe, to hold a ship: for that and other dangers more, it is not good nor convenient to faile up the river without a Pilot.

Of the tydes, and course of the streames.

BEfore Callice and Blacknesse the flood falleth first one quarter to the land, afterwards northnortheast.

Betwixt Blacknesse and Bulleyn the flood falleth north and by east by the land, but a seaboard in the offing n. n. e. A southsoutheast Moone maketh there the highest water.

Betwixt Bulleyn, Diep, and before the Somme, the flood falleth first one quarter to the land; afterwards northeast and by east, and the ebbe southwest and by west.

Betwixt Diep and Struyfaert without the land in the fareway, the flood falleth northeast and by east, and the ebbe southwest and by west.

At New-haven, and in the river of Roan a southeast moon maketh a high water.

From Struyfaert to Caen in the Fosse, the flood falleth s.s.w. and the ebbe n.n.e.

Of the marks and depths thwart of these lands.

TO the southwardes of the Oldman, or Tour d'Ordre, lieth the high land of Eastaples, which is very good to be known, because thereabouts is no land so high. When that is northnortheast from you, and you be thwart of the Somme, it is there deepe 8 and 9 fathome.

Vpon the land of Somme towards Diep, stand many sharp towers, and some milles and trees, and hath all alongst the coast a sandy strand.

Before Diep men may see the land in 20 & 22 fathome.

About 4 leagues without Struyfaert it is deep 20 fathom.

Between Diep and Seynhead stand also many sharpe towers, trees & houses upon the land. Struyfaert is best to be knowne, by a high rocke that lieth by it, like to a high tower, thwart of it in the fareway it is deep 16 & 17 fathom.

Courses and distances.

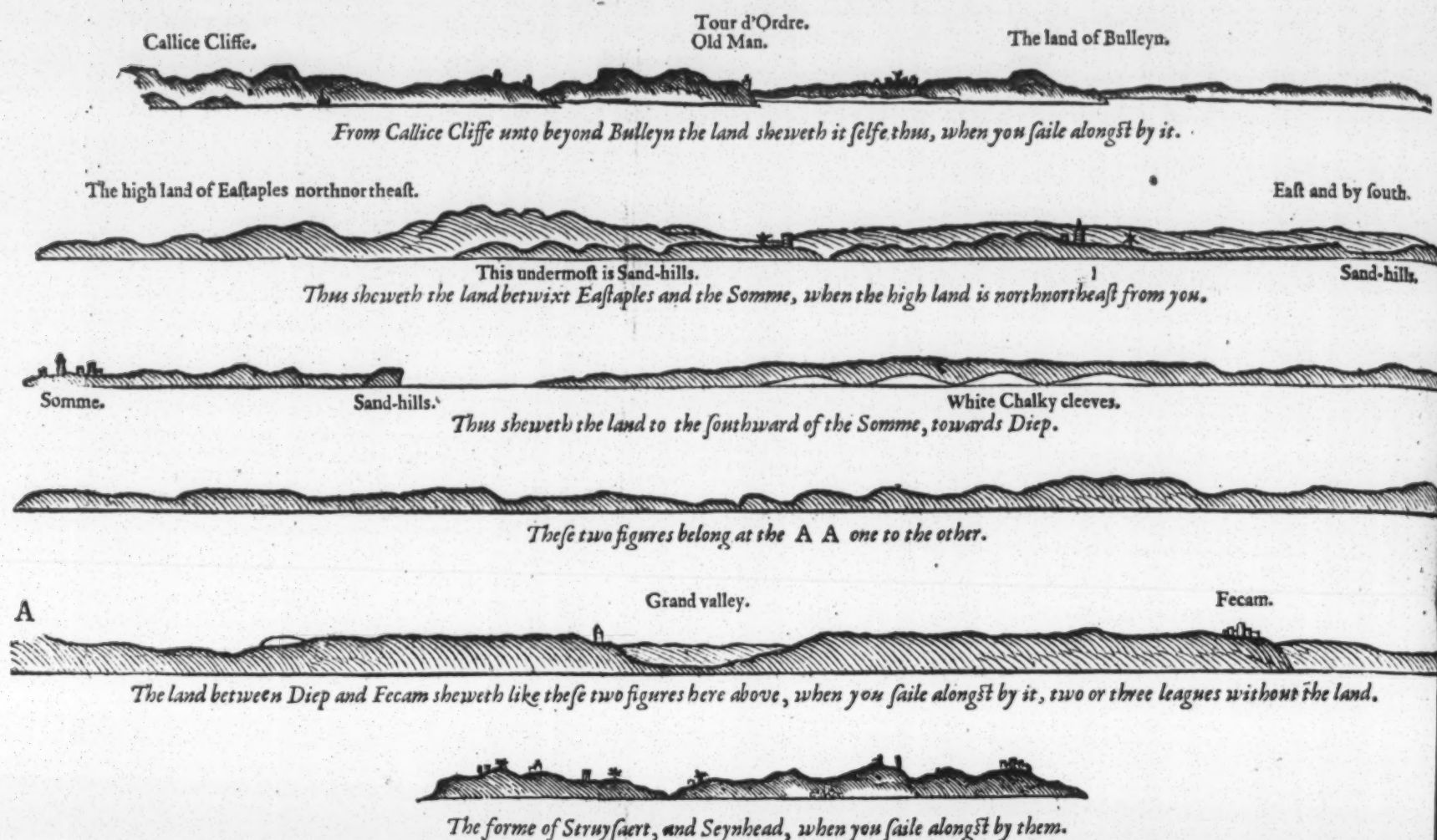
From Callice cliffe to Blacknesse s.w.	1 great league:
From Blacknesse to the Oldman, south	2 leagues.
From Blacknesse to Somme south	9 leagues.
From the Somme to Tresport s.f.w.	7 leagues.
From Tresport to Diep southwest	7 leagues.
From Diep to Fecam, w.f.w.	11 leagues.
From Fecam to Struyfaert southwest & by west	3 leagues.
From Struyfaert to Seynhead the course is s.f.w.	2 great l.
From Seynhead to Caen in the Fosse the course is southwest	6 or 7 leagues.
From Blacknesse to Diep s.f.w. and s.w. and by s.	17 leag.
From Blacknesse to Struyfaert, or C. de Caux, s.w. and by south somewhat westerly	29 leagues.
From Blacknesse to the Caskets the cours is w.f.w.	48 leag.
From Blacknesse to Wight west somewhat southerly	37 leag.
From Blacknesse to Beachy west	20 leagues.
From Diep to Wight the course is w.n.w.	37 leagues.
From Diep to Brachy northwest	21 leagues.
From Diep to Dover north	23 or 24 leagues.
From Seynhead to Diervliet, or the point of Sherburgh, west somewhat northerly	20 leagues.
From Seynhead to Portland northwest and by west	38 leag.

From Struyfaert to the east end of Wicht, northwest northerly 29 leagues.
 From Struyfaert to Beachey north 23 or 24 leagues.
 From Struyfaert to Fairly, north and by east 27 leagues.
 From Struyfaert to the point of Dover, n. n. e. 33 leagues.

Heights.

The Somme lieth in 52 degrees 18 minutes.
 The point of Struyfaert in 45 degrees 45 minutes.

How these lands doe shew themselves at sea.



C H A P. I I.

The Coast of Normandy from the Seyne unto C. de Hague,
 and the Casket.

Tochet.



Two great leagues to the southwards of the river of Roan, lieth a Tyde-haven called Tochet, on the west side of the entry standeth a beacon, by it you must goe in, or you may sound it in by the Easter shoare. Southwest, or southwest & by south from the point of Seynhead, about fixe or seven leagues off, ly many banckes, a good waies in sea, you may saile on both sides of them (as well to the eastwards as to the westwardes) into the Fosse of Caen, which lieth in most south, and lieth in a Bay. At the west side lieth a chindle, where men may ride within it, it is wide and broad, and all sandie strand, the Eastlands is sand-hills, and farre flat in fixe and seven fathome, there men may goe in, sounding with the sounding pole.

Fosse of Caen.

C. of Shirebrough.

From Seynhead to Cape de Barfleur, or Cape de Schierbrough, the course is west nineteene leagues. About foure leagues to the eastwards of it, lie the Ilands of S. Marques, men may saile round about them, but it is not there very cleane.

S. Marques. La Hange.

A league to the westwards of the Ilands of S. Marques lieth La Hange a flat Tower, to the westwards of it lieth the point of Barfleur, betwixt both is a great Bay where men may ly in fix or seven fathom land-lockt, for a northnorthwest wind. A northeast wind bloweth there open in.

Sunken rock.

From the north point or C. de Barfleur (which lieth northnorthwest from you, when you ly in the road) lieth off a banck or little riffe, yet a shippe may goe over it. North-east a league and a halfe off from the foresaid point, lieth a rock under water, where ships may not goe over.

From C. de Barfleur to Shirebrough it is west and west-northwest foure leagues, that is a little Tyde-haven. To the

westwards of the point of Barfleur, ly some fowle grounds, if you keepe the high land of Shirebrough without the Cape the Wyck, you shall not come neare them.

Before Cape de Wyck is a good road in fixe fathome, a little to the eastwards of the two high rockes in a sand-bay.

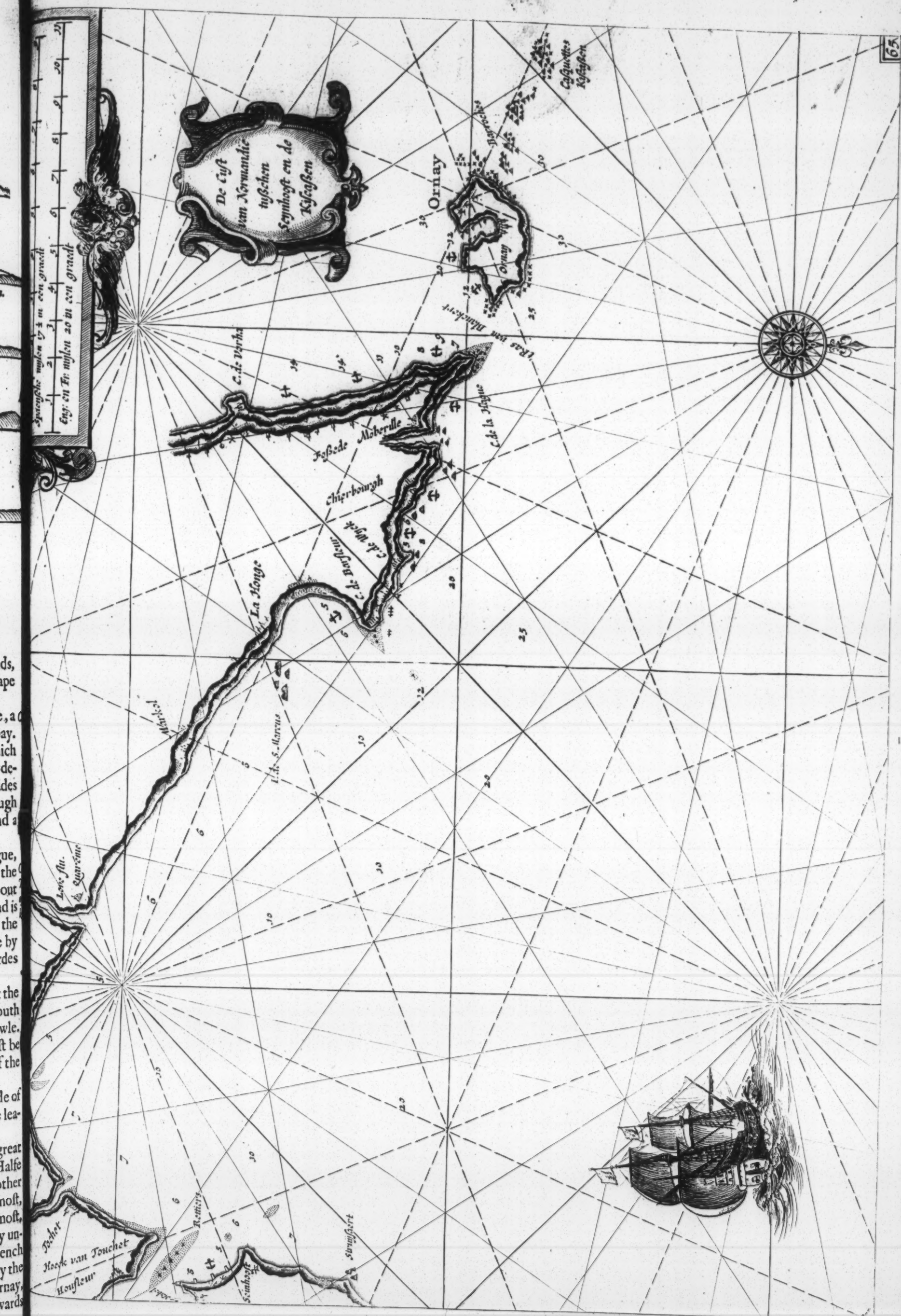
Before Shirebrough ly some rocks, or little Ilands, which are cleane round about, to the westwards of it lieth a Tyde-haven, called the Fosse of Moberille, before it on both sides ly four or five high rockes, at high water men run through betwixt them, and so into the haven. A great league and a halfe to the westwards of it, lieth C. de Hague.

Two leagues west and by north from Cape de Hague, lieth the Iland Aldernay or Ornay, betwixt them goeth the Race of Blanckert through. Aldernay or Ornay is about three leagues long, and lieth east and west. The east end is cleane, men may saile reasonable close alongst by it, but the west end is verie fowle: there ly some little Ilands close by the west end, being passed them, men may saile towardes Iarsey without any feare.

To the southwardes of the foresaid little Ilands at the west end lieth of a ledge of rockes, within it, on the south side, it is cleane, except at the south point, that is also fowle. He that will ancker on the south side of Ornay, must be mindfull thereof, and ancker a little to the eastwards of the Tyde-haven.

From the west end of Ornay lieth a great multitude of rockes west and by north, and westnorthwest off three leagues into the sea.

Vpon the outermost and westermost end, lieth a great high rock with many other small rockes, about it. Halfe waies betwixt this great rocke and Ornay lieth another great rock, but not so high as the foresaid westermost, from it ly off a multitude of rockes towards the outermost, which fall dry at low water, but at high water many ly under water. These two great rocks are called by the French Les Casquettes, and by the Dutch the Kiskassen, and by the English the Caskets. Close by the west end of Ornay, towards



towards the Caskets, ly other two great ranes of rockes, called the Barroches.

Of the flowing and setting of the tydes.

BEfore the haven of Caen a southsoutheast Moone maketh high water; within the haven a south and by east Moone.

At Marckell, la Honge, Barfleur, Sherbrough, and C. de Hague by the shoare, a south and by east moone.

From Seynhead to Barfleur the flood falleth by the land east and by north, and the ebbe west and by south. But in the channell a seaboard the land, the flood falleth away eastnortheast, and the ebbe westsouthwest.

Of the depths, and markes for to know the land by.

ABout C. de Barfleur and Sherbrough foure leagues from the land, it is deepe thirty fathome.

Barfleur is a high point, below upon the white land standeth a flat tower, two milles and some little houses, and to the westwards of it is more white land.

Vpon Cape the Hague standeth a Castle, with a little

turret; a little to the eastwards of it in the land standeth a sharp tower. Two leagues to the eastwards of it lieth Sherbrough with a flat steeple.

The Iland Ornay is upon the west end high with a steepe going down point: the east end is hilly, or with hommocks, but lower then the west end, in sailing by it, men may see upon it a tower or two with some milles. Vpon the north side of the Iland lieth a white hill like a sandhill.

To the northwards of the Caskets, two leagues from land it is deepe 35 and 40 fathome.

Courses and distances.

From Caen to Dierfliet, or the point of Barfleur north-west 16 leagues.
From Dierfliet to Cape de Hague west and by north 8 leag.
From C. de Hague to the outermost of the Caskets west and by north 8 leagues.
From the Caskets to Beachy n.e. and by e. 37 leagues.
From the Caskets to Wight n.e. and by north 20 leagues.
From the Caskets to Portland north & by west 13 leagues.
From the Caskets to the Steart westnorthwest 19 leagues.
From the Caskets to Silly west somewhat northerly 56 leag.

How these lands doe shew themselves at sea.



Thus sheweth the land of Caen when you are four leagues off from it.



Thus sheweth the land of Sherbrough, and the land to the westwards of C. de Hague when it is southeast foure leagues off from you.



Thus sheweth Ornay when you shall saile alongst by it foure leagues from the land.



Thus sheweth Ornay with the Caskets, when it is southsoutheast you three or foure leagues.



Thus sheweth Ornay and the Caskets, when you saile alongst by them, and Ornay is southeast from you three or foure leagues.

C H A P. I I I.

The Coasts of Normandy and Brittain betwixt Cape de Hague and Rosckov, and of the Ilands thereabouts.

From the east point of Ornay to the east end of Garnsey (about to the southwards of Ornay) the course is westsouthwest, seven leagues; but from the Caskets to the west end of Garnsey south-west and by south seven leagues.

Road under
Garnsey.

If you will anker under Garnsey (comming from the Caskets) then runne on to northeast point of Garnsey, and so far to the eastwards of it, untill you get sight of the castle that standeth upon the rock on the east side of Garnsey. Or if you come about to the westwards of the Caskets, then goe on southeast, or somewhat more southerly, untill the northeast point of Garnsey be south & by west from you, saile then towards it, you shall come in sight of that foresaid castle upon the rocke. Bring that over the south point of Garnsey, and saile in upon that marke, betwixt the Iland Arem, or Harm, and Garnsey, untill you come by the foresaid castle; betwixt these Ilands it is on both sides full of rocks, whereof you must take good heed, especially on the larboard side towards Arem, when you are come by the castle, you may anker within or without it, where you please, without the castle in 12 or 13 fathome; or within the castle, (that is betwixt the castle and Garnsey) in fixe or seven fathome at low water, it doth flow there fixe or seven fathome, up and downe, which men must reckon upon.

Vnder the south side of Garnsey men may ride for northwest, north, and northeast windes. If you come from the west, or from the Caskets, you must runne close about

by the southwest point, called C. de Gruse, and alongst by the south side of the Iland, well halfe waies the Iland, and anker there where you think good, in eighteen or nineteen fathome. If the wind shift to the southwest, or to the west-southwest then you may run about by the south point unto the foresaid castle, & anker there either without or within it, as here before is said. From the aforesaid south point, lieth off a little ledge of rocks, whereof some rocks ly above and some under water, that you must avoid when you saile about by it.

South and by west, and southsouthwest about eight leagues from Garnsey lieth a great ledge of rockes, more then a league great, called Rockeduves.

West and by south from Rockeduves lieth a rock called Bernovill, which at high water lieth under water, and at low water lieth above water.

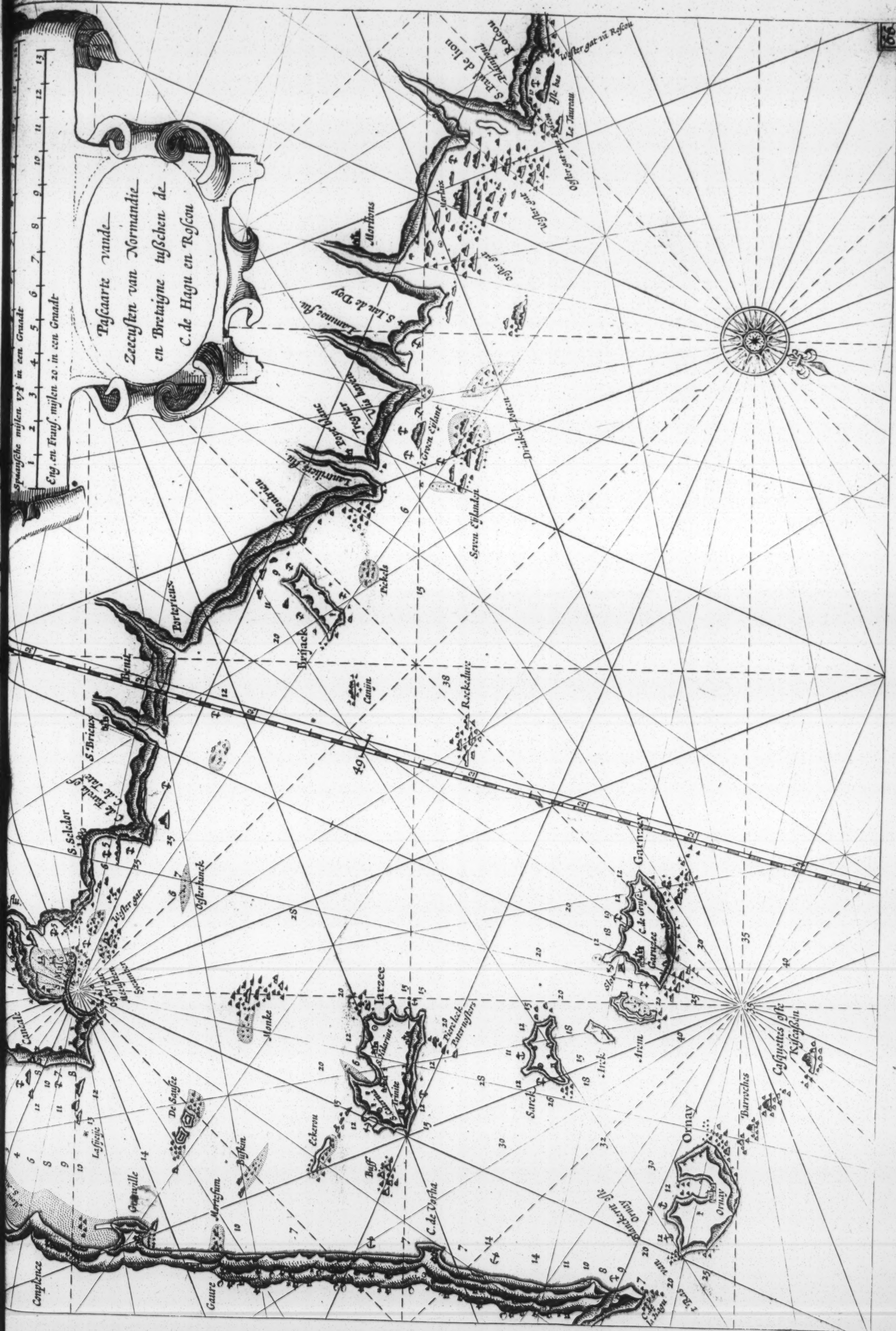
About two leagues east from Garnsey lieth the Iland Sarck, there men may anker round about it in 25, 26, and 27 fathom. From the north end ly off some rockes, whereof some ly above, and some under water. At the south end ly also some rockes, but all above water.

Betwixt Garnsey and Sark ly two other little Ilands, Arck and Arem, or Harm, there men may saile through betwixt them.

The Iland Iarsey lieth from Garnsey southeast distant seven leagues, round about this Iland are good roades at divers places. All alongst the north side men may anker in tenne and eleven fathome. At the same north side, somewhat within the west point, ly some great rockes, a good waies off from the shoare, called the *Pater nosters*, or Pierre legh. At the southwest point ly many rockes which ly off a great waies into the sea, to the northwardes of them, to wit betwixt them and the westermost point, at the west side of Iarsey men may anker at divers places in tenne, eleven and twelve

Spanſche mijlen 17½ in een Graadt

Eng. en Frantſ. mijlen 20. in een Graadt



S. Catheri-
nes Bay.

twelve fathome. At the south side of Iarsey is also a good road for a northwest and westnorthwest windes. At the east side lieth S. Catherines bay, there is also a very good road for westerly windes.

Mankiers
Rockes.

The west end of Iarsey and S. Malloes, or the Iland Sifember before S. Malloes, ly southsoutheast, and northnorthwest, eight or nine leagues a funder. About halfe waies betwixt both right in the fareway, ly a great number of high rockes together, which containe in circuit in sailing about, seven or eight leagues, called the Mankiers, they ly farre towards Iarsey, some above and many under water, so that it is not without great danger to run through betwixt Iarsey and the Mankiers.

When men will faile through the Race of Blanckert bound for S. Malloes, they run commonly through betwixt Sarck and Iarsey: men may also faile to the eastwards of all the Ilands and showlds alongst the coast of Normandy, toward S. Malloes, in manner as followeth.

Le Beuf.

When men come a little past the C. Voorha, they shall meet (thwart of the Iland Iarsey) with three or foure high rockes, called *Le Beuf*, men may runne to the westwardes of them, and so through betwixt them and the Iland Iarsey, or els to the eastwardes of them alongst by the main land, even as they will, towards the riffe of Mortefaim, that lieth upon the coast of Normandy southsoutheast eight leagues from Cape the Voorha.

Bufkin.

Over against, or thwart of the Riffe of Mortefaim, lieth a rane of rocks lying east and west more then a league in length called *Bufkin*, at the east end many of them ly above and at the west end most of them ly under water. Men must faile through betwixt them and the riffe of Mortefaim, that are bound for Granville.

Eckerou.

Betwixt the foresaid rockes *Beuf* and *Bufkin*, lieth another great rane of rockes called *Eckerou*, which ly off from the southeast point of Iarsey towards Granville; you must leave all these rocks on the starboard side, and run alongst to the eastwards of them.

Granville.

From the riff of Mortefaim to Granville, the course is southsoutheast and from *Bufkin* southeast 4 leagues.

Cape de Voorha, and Granville are two points that ly without the other land. About the south point of Granville ly two or three little rockes; along by them men must run in within a Pier or head, where the ships ly dry at low water. Betwixt C. the Hague, and Granville, men may see upon the land many little houses, mills, and trees, as they faile alongst by it. A little to the southwardes of the riffe of Mortefaim standes a church with two steeples called *Quotanse*. All alongst this whole coast is every where good anckering in fixe or seven fathom, especially a little to the southwards of Cape de Hague.

La Shan-
see.

About two leagues west from the point of Granville lieth another great rane of rockes two great leagues long, lying east and west called *La Shansee*, betwixt them and the point of Granville men must faile through that are bound for Concalles or S. Malloes.

Mount de
S. Michiel.

About five leagues to the southwards of Granville, in a great bay, lieth an Iland before the river of Aurantie, about a league without the land, called Mount de S. Michiel, upon it lieth a Castle, or little towne called S. Michiel, with a high Tower which men may see at sea. This Bay is to the southwards of Granville, within the rocks of Concalles, very flat and rising ground, from thirteene, ten, eight, six, & four fathom to one fathom, so that at low water the Bay falleth so farre dry, that from the strand men can see no sea nor water.

Concalles.

From Granville to the point of Concalles the course is southwest five leagues, from that eastwards ly three rockes, under which men may ancker in ten fathome. For to faile to the towne men must runne in betwixt the point and the foresaid rockes. It is betwixt them both eight and nine fathome deepe. Before the towne it is sholder water. To the northwards of the towne ly other two rockes, there men may also ancker under in five and fixe fathom water.

From the outermost rockes by the point of Concalles untill you come before S. Malloes, the course is west, and west and by south five leagues.

Before the haven of S. Malloes, lieth an Iland called *Sifember*, upon the west end thereof standeth a mill, & upon the east end a church with some little houses being a Friery, comming out of the sea, you can but even scarce see the Church, but being within the Iland, you may see it better, because it standeth on the south side of the Iland. A great shot of a cast peece to the eastwards of *Sifember*, lieth a great high rock called the *Meuwestone*: betwixt that and *Sifember* it is all full of rockes and stones, which at high water ly most under water: there is a little channell betwixt them both, which the Frenchmen use with their small shipping, through betwixt the rockes, but it is not to be used with great shipping, neither by them that are not very well acquainted with it.

Betwixt the *Meuwestone*, and some other rockes to the eastwards of it, lieth in a channell south and south and by east in, called *la Congie*. For to faile in there you must runne in close aboard to the eastwards of the *Meuwestone*, south-east and by east right in with the towne, untill you be gotten in two third parts of the distance (betweene the *Meuwestone*, & the towne) from the *Meuwestone*, & are one third part of the distance from the town, that is when the *Meuwestone* is twice so farre from you as the towne, then you shall see by the northwest point of the towne, two great rockes, about a shot of a cast peece from the foresaid point; upon each rock standeth a little house, the outermost is the smallest, and is called the little Bee, the neereft to the towne is the greatest, and is called the great Bee, faile then towards them, and runne in about them within a cables length of them, but keepe that course so long, untill that the little tower (that standeth a little to the southwards of the towne upon the point) come over the tower of Bore, a little to the eastwards of Saledoor, keepe them one over the other, and faile so in, unto the south end of the town, where the mills doe stand, then you shall see there upon the rocks two beacons, run betwixt them through at high water, untill you come within the towne, at the east side, the shippes ly morred with foure cables, dry at low water, two fast on the towne, and two upon the sand. Betwixt these two foresaid beacons, to the southwards of the towne, and thereabouts, is the ground sharpe, rocky, and stony, therefore men must take heed not to stay there at low water, or to ground there, but within on the east side of the towne it is cleane sandy ground, there may the shippes ly a ground without danger.

A little within, or to the southwards of the foresaid rock the little Bee, men may ancker in five or fixe fathome at low water, so that the tower of Bore commeth a little to the eastwards of the little tower upon the point to the southwards of the towne, that road is called by the French *La Ranse*, there men commonly first ancker, and stay for high water, for to goe in about to the southwards of the towne. It floweth here at S. Malloes, and thereabouts, seven fathom up and downe with an ordinarie tyde.

From the west end of *Sifember*, ly off also a great many rocks alongst to the westwards, more then a great shot of a cast peece, at the end of them goeth in the Wester channell of S. Malloes, east and by north in. For to faile in there, you must look out for a sharp little Tower, that lieth somewhat to the northwards or to the eastwards of S. Malloes, within the land called *Pellemy*; when you have brought that east and by north from you, then you shall see upon the shoare right against it, a great black rocke, which for blacknesse sheweth it selfe without all the other rockes thereabouts, & thereby is very good to bee knowne: Bring that rocke and the foresaid little tower one in the other, and faile so right in, untill you come thwart of the Iland *Sifember*, or els that the little tower (upon the point to the southwards of the towne) come to the tower of Bore, to the eastwards of Saledoor; faile then towards the road of *La Ranse* to the southwards of the little Bee, or els if it be high water, you may runne in upon the markes, and then in about to the southwards of the towne, as here before is said.

When you faile into this wester channell, you shall leave on the starboard side a high rocke (called the *Schoorsteen*) with more other rockes to the westwards of it, which at high

S. Malo.

at high water are most of them overflowne. On the north side, that is on the larboard side, ly also many rockes, whereof many of them are overflowne at high water, and also many remaine above water.

Yet a souther channell lieth in by the land to the southwards of the rock of S. Antony, upon marks that men do see a stearne the ship, but it is not used but with small shipping.

About halfe waies betwixt the wester channell of S. Malloes, and C. de Farela, lieth a stony banck under water. A little to the westwards of C. de Farela, lieth a great rock, called la Maye. When you will faile from C. de Farela towards S. Malloes, and that you keepe the foresaid rock right upon the point of Farela, you shall so (without faile) faile upon the Stonebanck: but if you keep the rock hidden under or behind the point, then you shall faile alongst to the southwards of it. Or else if you keepe it without the point (so that you may see through betwixt it & the point) then you shall faile alongst to the northwards of it. The foresaid rock is a good marck for to know Cape de Farela by. You may not faile through it and the Caep.

Foure leagues west from S. Malloes lieth a great Sand-bay, where men may ly landlockt for all windes: men doe ancker within a great rock, right against a mill and some trees.

About two leagues northwest from that Sand-bay lieth the Cape de Farela, which is also called Cape de Late, after the Castle de Late that standeth to the eastwards of the point, there is a good Road for west and southwest winds.

Two great leagues northwest from the entry of the haven of S. Malloes, lieth the Oysterbanck, and lieth from la Pierre de la Porte east and west, a little les then a mile and a half, there under it, men may ancker in 6 or 7 fathome.

To the westwards of Cape de Farela unto the north end of the Iland Briack, the course is w. & by n. 9 or 10 leagues. Two leagues from the land west from the Cape, lieth a great rane of rockes above water. Between the foresaid Cape and the Iland Briack, ly the Havens or Rivers of Saint Brioux, and Saint Benit.

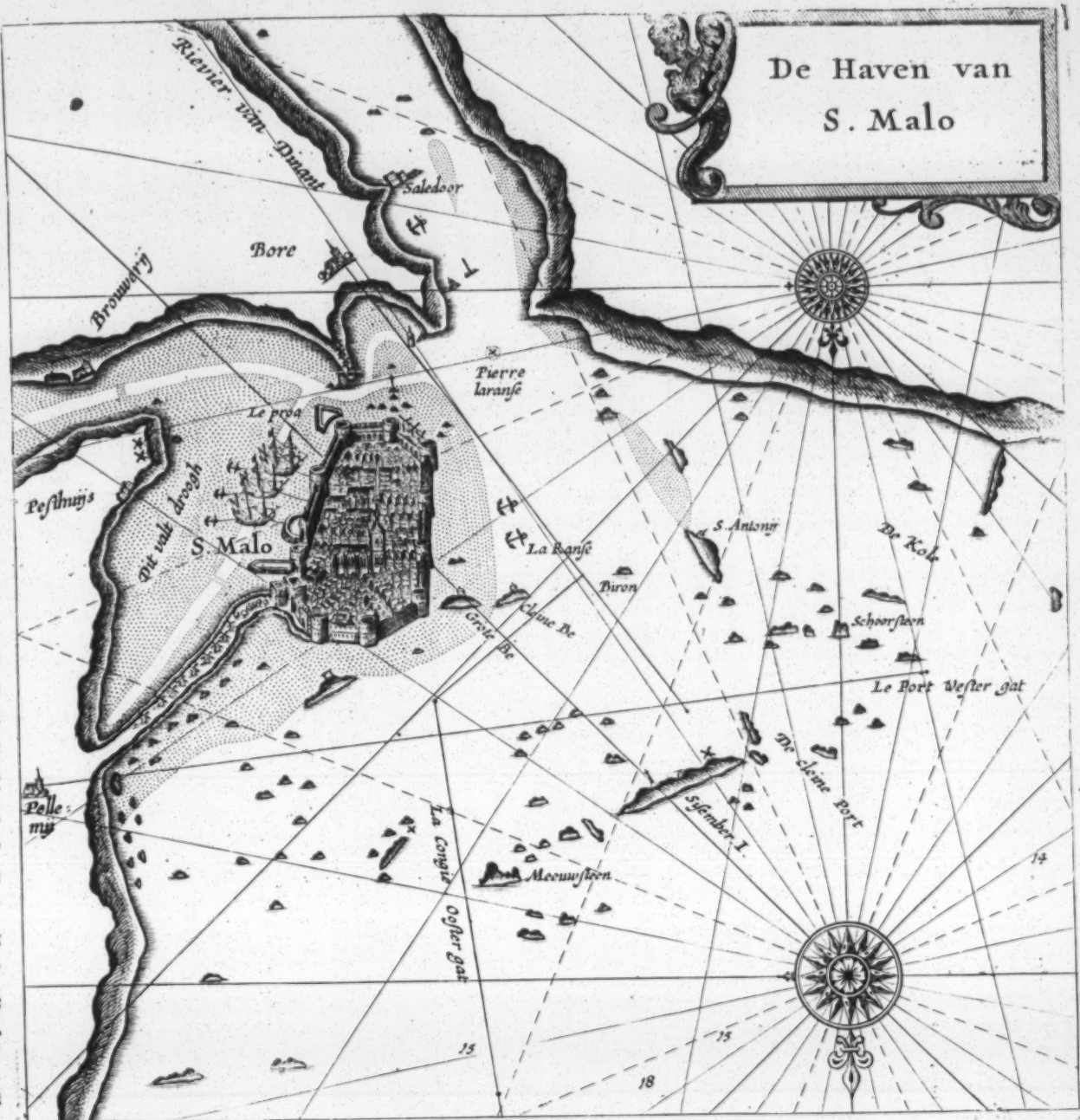
The Iland Briack is two leagues long, and lieth south-southwest and northnortheast, when you come from the east you shall see two milles upon it, and betwixt them a high round-hill, with a little house upon it: you may faile round about this Iland, and may make roads on every side where you will, although round about it here and there ly some rocks, yet it is all over good ancker ground. A good waies off from the northeast point lieth a rock called Souffe, and at the north end, lieth a ledge of rockes under water, whereof you must take heed.

A great league westsouthwest from Briack, three or four leagues a sea-board the land, ly the outrockes called the Pickels, men may faile round about them also, but to the eastwards of them towards the main land, ly many funcken rockes.

Four leagues to the westwards of Briack lieth Port Blanck upon a great river called Lantrilliers, to the eastwards of this haven ly off many outrockes.

To the westwards of Port Blanck, ly the Sept Isles, or seven Ilands, lying from the Pickells distant five leagues east and west. A league to the southwards of them lieth the green Iland, there you may ride round about it. Betweene the seven Ilands you may not sail through, but to the southwards of them, betwixt them and the green Iland, goeth a

West. Water. ij. Booke.



broad channell through. From the eastermost Iland lieth off a fowle riffe to the southwards, upon the outermost end of that riffe, lieth a rock as a good marke for to faile about the riffe. Northwest from the west end of the seven Ilands, lieth also a funcken rock, which at low water may be seene. Men may also faile alongst by the coast from Port Blanck within to the southwards of the green Iland, and come out againe into the sea to the westwards: From thence north-west off into the sea, ly the Triacle Pots, these are great fearefull out-rockes, which ly spread wyde and broad west-southwest from the seven Ilands, and foure or five leagues a sea-board the land.

Betwixt the Triacle Pots and the seven Ilands lieth the river of Laminoe, to the westwards of the greene Iland: for to faile in there, men must take good heed of the northeast point, which is fowle.

Thwart of the seven Ilands, upon the maine land, standeth a Church with a high steeple, called Our Lady of the Clearneffe, thereby men may know them.

Thwart of the Triacle Pots standeth also a high Tower, thereby men may know when they are neere them, but it must be very cleare weather before men can well discerne it upon the land.

Hee that commeth by night or darke weather from the Fourné, or Vshant, and is bound to S. Malloes, let him not goe with a southerly wind, to the eastwards of eastnortheast, or northeast and by east with a westerly wind, so long untill hee hath the length of the Triacle Pots, that they be on his broad side. The flood falleth southeast within the Triacle Pots and the seven Ilands, and shold by night easily draw a ship towards them. By day, or when there is sight, there is no such danger.

Within the Triacle Pottes lieth the tyde haven of Saint Iohn de Doy, two leagues to the westwards of the green Iland, and two leagues to the eastwards of Morlions, men may faile from thence through the rockes unto Morlions, and ancker in five and sixe fathome at low water.

Morlions. To the westwards of the Triacle Pottes lieth a great rock, the easter entry of Morlions, lieth from it southwest and by south distant two leagues, but the wester entry lieth from it westsouthwest and west and by south foure or five leagues, that goeth in by a great long ragged rock. This entry men may saile in south and south and by west, unto the castle of Morlaix; being about the castle they may runne through the rocks againe to the eastwards, and runne out againe at the easter entry northnortheast, and north and by east into sea, according as the tyde shall be, the flood commeth there out of the northwest.

Morlaix. If a man would goe from Morlaix to Morlions, he may goe on east through the rocks, and so saile to it: it is all broken land, & there remaineth at low water five fathom depth.

S. Paul de Lion. If you be bound to S. Paul de Lion, you must runne right with the great rock, with the two horns or Sadle, and so close alongst by it: being past it, edge to the land, upon the strand lieth a village called Plempoll, saile right with it, and alongst by it, to the eastwards of it goeth in the river. These are all tyde havens, but betwixt the rockes of the Morlions, and the Iland Bas, it is at low water deepe enough for to save a ship.

The land of S. Paul de Lion is double land, upon S. Pauls Church stand two sharpe steeples. The Iland Isle de Bas lieth thwart before it, upon it standeth two stakes, to see to a farre off like milles. Vpon the east end of that Iland lieth a very high ragged rock, when you are to the eastwards of this rock, you shall see two sharpe steeples a space one from the other, these are the steeples of Plempoole: you may also then see the Castle of Morlaix ly southeast from you, upon a high rock.

Isle de Bas. The foresaid outermost long ragged rocke of Morlaix, lieth from the top of the Iland Isle de Bas, east and east and by south three or foure leagues. Men may saile alongst by the maine land within and through these rocks, untill they come to the seven Ilands, they are all great bays where at most places is good ancker ground.

About foure french miles northwards, from Isle de Bas, lieth a rocke, there is with very high water no more then tenne foot water upon it.

Roskow. Within the Isle de Bas lieth the towne of Roskow, you may sail into the haven of Roskow at both sides of the Iland.

For to saile into the easter channell, when you are passed by the high rocke with the sadle, or two hornes, called *Le Taureau*, & come by the land, betwixt the east point of the Iland, and the point of the maine land over against it, you must saile in keeping the middle of the channell. It is in this channell seven & eight fathom deepe. Being come within the point of the Iland, you must runne in about by it, west & by south, & west on, untill you come about halfe waies within the Iland, and ancker there in 8 or 9 fathome. And then Roskow shall ly south & south & by east from you.

If you will saile into the wester channell, you shall see to the westwardes of it, close by the maine land, two great long rockes. From the point of the maine land, a little to the eastwards of the eastermost long rocke, lieth off a riffe from the land, which maketh the west side of the channell, you must runne in southeast betwixt that riffe and the west point of the Iland, and when you come within the point of the Iland, you must edge up northeast unto the middest of the Iland, and ancker there as here before is sayd.

From Isle de Bas alongst to the Fourne or Vshant lieth the coast westsouthwest 16 leagues. Read thereof in the beginning of the fourth booke.

Of the tydes, and course of the streames.

AT Cape de Hague by the shoare, a south and by east moone maketh high water.

In the Race of Blanckert a north and by east, and south and by west moone. The flood falleth through the Race northeast, and the ebbe southwest.

In the Ilands also a north and by east, & south & by west moone maketh a full sea. Men can not wel reckon the falling of the tydes there, because they have divers courses

about the Ilands, but for the most part northeast and northeast and by north. A quarter of the tyde the flood falleth thwart into the Caskets.

In Garnsey a north and by east, and south and by west moone maketh full sea.

At Concalles and Granville a westnorthwest moone.

At S. Malloes an east and west moone maketh high water.

The flood falleth in there at the wester channell, & goeth out againe at the easter channell, men must reckon thereupon when they will saile into these channells.

From the Iland Briack in the bay of Benit the flood falleth southeast, but in the fareway eastsoutheast, and westnorthwest.

At the east side of the Iland Briack in the road f. f. e. An east and west moone maketh there the highest water.

Betwixt the Ilands Briack and Garnsey, a westsouthwest moone maketh full sea, the flood runneth there eastsouth-east, and the ebbe westnorthwest.

On that coast, and within the Caskets the tyde turneth continually against the Sunne, so that it is there never still water.

Betwixt Sept Isles, or the seven Ilands, and Garnsey in the fareway, a westsouthwest moone maketh full sea.

Betwixt Briack and the seven Ilands, an east & by north, and west & by south moone maketh full sea. The flood falleth there east and east and by south.

Betwixt the seven Ilands and the outer rockes of Morlions, the flood falleth in southeast within the Triacle Pottes towards the greene Iland, but in the fareway in the offing, east and east and by north.

At Morlaix and S. Pauls maketh highest water a west and by south moone, but in the fareway in the offing thwart of it, a southwest and by west, and westsouthwest moone.

At the Isle de Bas maketh high water a west and by south moone.

In the fareway there in the offing the flood falleth east-northeast, and the ebbe westsouthwest, and so likewise from thence all alongst the coast of Bretaine, unto the Fourne or Vshant.

Of the depths and grounds.

Betwixt the Caskets and Garnsey it is 35 & 40 fathome deep, most all stony ground.

Northwest about foure leagues from Garnsey is a pit where it is 80 or 90 fathome deepe, els it is thereabouts 40 fathome deep.

Betwixt Ornay and Iarsey it is deep 20 and 25 fathome.

In the fareway of Iarsey, Rockduve and the Iland Briack, it is deep 20, and 25, and 30 fathome.

About the Triacle Pots alongst the coast it is 45 & 50 fathome deep, in such depths men may see the land thereabouts. By night it is not good to come nearer that coast and the seven Ilands, then in 45 fathome.

Thwart of S. Paul de Lion, and the Isle of Bas, 5 leagues from the land it is deep 45 and 50 fathome.

Courses and distances.

From C. de Hague to C. de Voorha, south and by east 7 leagues.

From C. de Voorha to Granville f. f. e. 9 leagues.

From Granville to Mount S. Michiel f. f. e. 5 leagues.

From Granville to the point of Concalles, f. w. 5 leagues.

From the point of Concalles to the easter channell of S. Malloes, west and west and by south 5 leagues.

From the Iland Sifember, before S. Malloes unto C. de Farelle west 4 or 5 leagues.

From C. de Farelle to the Iland Briack west and by north 9 or 10 leagues.

From the Iland Briack to the Pickells w. & by f. 2 leagues.

From the Pickells to the seven Ilands, w. f. w. 5 leagues.

From the seven Ilands to the Triacle Pots w. f. w. 4 leagues.

From the Triacle Pots to the Isle de Bas, w. f. w. 9 leagues.

From Isle de Bas to Vshant westsouthwest 16 leagues.

From

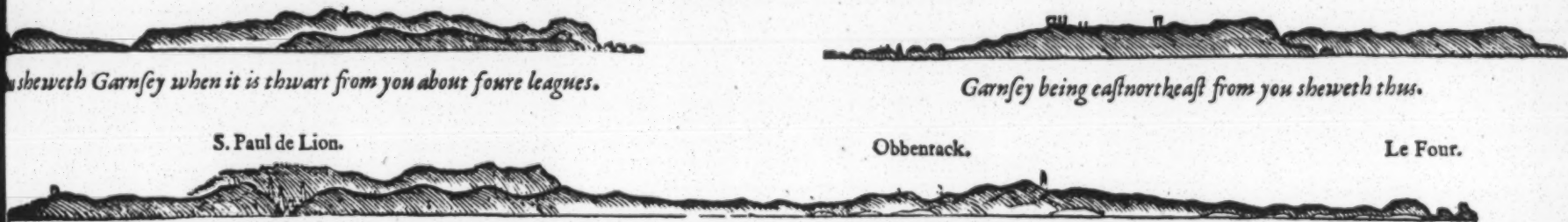
From C. de Hague to the west end of Iarsey betwixt Sarck and Iarsey through southsouthwest 9 leagues.
 From the Caskets to the west end of Garnsey southwest & by south 5 or 6 leagues.
 From Garnsey to Iarsey southeast and by east 7 leagues.
 From Garnsey to S. Malloes f. e. 16 leagues.
 From the south end of Iarsey to S. Malloes, southsoutheast 9 or 10 leagues.
 From Garnsey to the rockes Rockduves, southsouthwest 8 or 9 leagues.
 From Rockduves to Mankiers e. & by f. 9 or 10 leagues.
 From Rockduves to C. de Farela f. e. 10 leagues.
 From Rockduves to the rock Camine south and by west 4 leagues.
 From Rockduves to the Iland Briack south and by west 5 leagues.
 From Garnsey to the seven Ilands southwest and by south 15 or 16 leagues.
 From the Caskets to S. Paul de Lion southwest 29 leagues.
 From the Caskets to the Fournie or Vshant southwest and by west 45 leagues.

From the Caskets to the Lizard, west and west & by north 37 leagues.
 From Garnsey to the Lizard, west and by north 37 leagues.
 From the seven Ilands to the Lizard northwest and by west 29 leagues.
 From the seven Ilands to the Staert north and by west westerly 24 leagues.
 From the seven Ilands to Portland northeast and by north 32 leagues.
 From S. Paul de Lion to the Lizard northwest and by north 29 leagues.
 From S. Paul de Lion to the Staert north and by east 29 leagues.
 From S. Paul de Lion to Portland northeast and by north 40 leagues.

Heights.

The Caskets ly in 49 degrees 48 minutes.
 The seven Ilands, or Sept Iles in 49 degrees.

How these lands doe shew themselves at sea.



Thus sheweth the land betwixt S. Paul de Lion, and the Fournie, when you saile alongst by it foure leagues from the land.

C H A P. I V.

The Coast of England from Dover and Dongie Nefse unto neere the Iland Wight.



He point of Dongie Nefse lieth from Dover southwest & by west distant nine leagues. At the east side of the Nefse in Romans bay, over against the Romans Tower, is a good road for west & southwest windes: for to ancker there, runne so farre in the bay, that the point of the Nefse be south and south and by west from you, ancker there in about seven or eight fathome; you may also ancker on the west side of the Nefse, for a northeast wind, so that the point ly east and by north from you.

For to saile into the Camber of Rye comming from the west, you must keep Beachy without the point of Fairlee, & runne so towards the Nefse, and being come in faire by it, runne in within two cables length alongst by it, unto the end of the Nefse, then edge up to the westwards, and leave the beacons upon the starboard side, untill you come before the castle Camber, that standeth upon the souther chindle, there you may ancker in four and five fathom: from thence alongst even unto the towne of Rye, it is all set with beacons, which stand alongst by the east side of the Deep, upon the Daries, which at low water fall dry. In sailing unto Rye, you must leave all the beacons on the starboard side, and runne indifferent close alongst by them.

The point of the Nefse and Beachy ly westsouthwest and eastnortheast distant eight leagues. Beachy is by the seven white Cleeves, the best knowne land that a man can see any where. To the eastwards of Beachy men may ancker for westerly windes in fixe or seven fathome, so that the point be south and south and by west from you. To the westwards of the point of Beachy, thwart of the west end of the seven Cleeves, right against the Chindle, where men run alongst by into new Haven, men may also ancker in seven, eight, or nine fathome.

A league and a halfe to the eastwards of the point of

Beachy, nearest eastnortheast from the point, lieth a little sand, upon which, there is at low water and spring tydes scarce two fathome.

At the west end of the seven Cleeves lieth the river of Cuckmer haven, or new Haven, which hath two entries, the westermost entry lieth in by the west land, but is not to be used, but onely with very small shipping, it falleth altogether dry; the easternmost is commonly the best, and lieth northwest and by west in, there is at high water with a common tyde, not more then seven, and with a spring tyde 14 or 15 foot water; within, the ships ly every tyde dry: but before the village they remaine a floate, there they morre with foure cables fast on two green shoares. Vpon these entries men cannot well make any reckoning, they keep no certaine depth, when it bloweth a storm out of the south, they are oftentimes cast too with chindle, and opened again with a freshut.

Shorum is a tyde-haven, where is at high water, & spring tydes, 18 foot water, but at low water there remaineth no more then three foot water, so that then it floweth there fifteen foot up and downe. With a common tyde at high water there is twelve foot, and at low water three foot depth. The towne Shorum lieth a little English mile within the haven, ships (that draw but eight or nine foot water) can ly afloat a little beneath the towne at low water, or else they ly dry every where.

When you come from the eastwards from Beachy or new Haven along by the shoare, you may see open into the haven, before you come thwart of it: but comming from the westwards you shall not see it open before you come right before it, because the west point lieth somewhat further out then the east point. From the west point runneth off a little taile, but at high water you may run in alongst over it, otherwise you must runne in by the east shoare. Vpon the east point stand two beacons which you must bring one in the other, and runne in so right with them untill you come by the north shoare, and then in alongst by the foresaid north shoare.

At Shorum somtimes there are builded many great ships of three or foure hundred tunnes.

About eight leagues to the westwards of new Haven lieth Arondell, a tyde haven, where a ship may goe in at halfe flood, you must goe in there by the westland northeast in. In the entry it is two, and betwixt the two lands three fathom deep at high water: but within in the haven remaineth at low water four and five fathome: there you must ancker before the village.

Five leagues westsouthwest from Arondell, and thirteene leagues west and by south somewhat westerly from Beachy, ly the bancks or showlds of the Owers under water, a great league and a halfe a seaboard the land.

About two leagues eastnortheast somewhat easterly from the south side of the Owers, and two little leagues south from Arondell, lieth a showld of rocks and chindle, called Eastborough-head, as great as an aker of land, which falleth (at low water and spring tyde) dry, otherwise it cometh not above water, close to it, it is fifteen fathom deep. They that saile off from the haven of Shorum, & are bound to the westwards, must not goe more westerly then southsouthwest untill they come in eightene fathome, before they set their course more westerly for fear of this showld. About an English mile northwest from this foresaid showld, lieth also a luncken rock, whereupon at low water is no more then five or sixe foot water.

About halfe waies betwixt Arondell and Selsey runneth off a ledge of rockes thwart to the southwardes from the shoare, about an English mile and a halfe into the sea, called the Bogners, whereof some of the rocks fall dry at low water, but the outermost are alwaies under water.

About two leagues and a half southsouth on from Selsey, and foure leagues and a halfe from Wolfershorne lieth a stony drynes, which the English call the Horsh, upon the which at low water there is bot sixe foot water, upon the out side it is very steepe, the on cast you shall have fiftene fathome, the next cast but sixe fathome, and you should be fast before you can cast your lead againe, but upon the west side it is plaine, even so that you may lead it.

Betwixt Dover and Dongie nesse, and likewise thwart of the Nesse, a southsouthwest moone maketh full sea.

In the channell of Winchelsey a south & by east moone.

At Beachy by the shoare a s.s.e. and n.n.w. moone.

In the fareway thwart of it, a south and north moone.

From Dongie nesse to Dover the flood falleth northeast and by east, and the ebbe southwest and by west.

From Beachy to the Nesse eastnortheast and westsouthwest.

At Beachy by the shoare before the seven Cleeves the flood falleth east & by south, and the ebbe west & by north.

From Wight to Beachy e. and by n. and w. and by i.

Depths.

Betwixt Winchelsey and Pickardy in the middest of the channell it is deep 26 and 27 fathome, upon such depth men may see Fairlee and the land of Dover.

Without Beachy thwart of the seven Cleeves it is deep 28 and 30 fathome.

Courses and distances.

From Dover to Dongie nesse southwest and by west 9 leagues.

From the Nesse to Fairlee, w.f.w. 3 leagues.

From Fairlee to Beachy w.f.w. 5 leagues.

From Beachy to the Owers west and by south 13 leagues.

From thwart of the Owers in 12 fathome unto Dunnofe the south point of Wight, westsouthwest 5 leagues.

From Beachy to Blacknesse east 20 leagues.

From Beachy to Struysaert south 24 leagues.

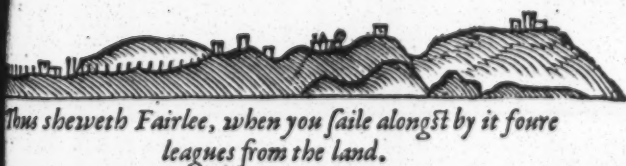
From Beachy to the Caskets s.w. and by west 37 leagues.

Heights.

Beachy lieth in 50 degrees 48 minutes.

How these lands doe shew themselves at sea.

Thus sheweth Fairlee when you come from the West.



Thus sheweth Fairlee, when you saile alongst by it foure leagues from the land.



Thus sheweth Beachy with the seven Cleeves, when you come from the West, and saile alongst by it.



Beachy sheweth thus when you come from the West.

C H A P. V.

The coast of England from Wight to Portland.

The Showlds or banckes of the Owers, ly about foure leagues to the eastwardes of Wight, and ly off a league and a halfe from the land, thwart of them standeth a tower in the land, when that is northnorthwest from you, then are you thwart of the southermost part of the showld; and if you keepe the Culver cliffe of Wight west and by north, and westnorthwest from you, comming either from the east or from the west, you can take no hurt of the Ower; you may runne alongst by them in twelve fathom upon your lead, without danger. If you saile away from the east end of Wight, east & by north, & e. n. e. you shall run in 12 fathom alongst over the east end of them. He that is there well acquainted, may also saile to the northwards of them, through betweene the land and the Owers.

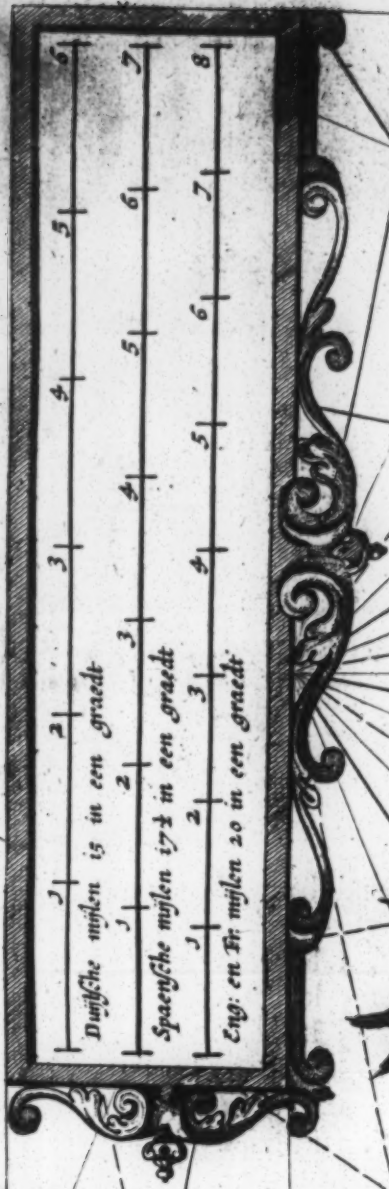
Betwixt the Owers & Portsmouth goeth in a great sound or haven, within it lieth the towne of Chichester.

Chichester.

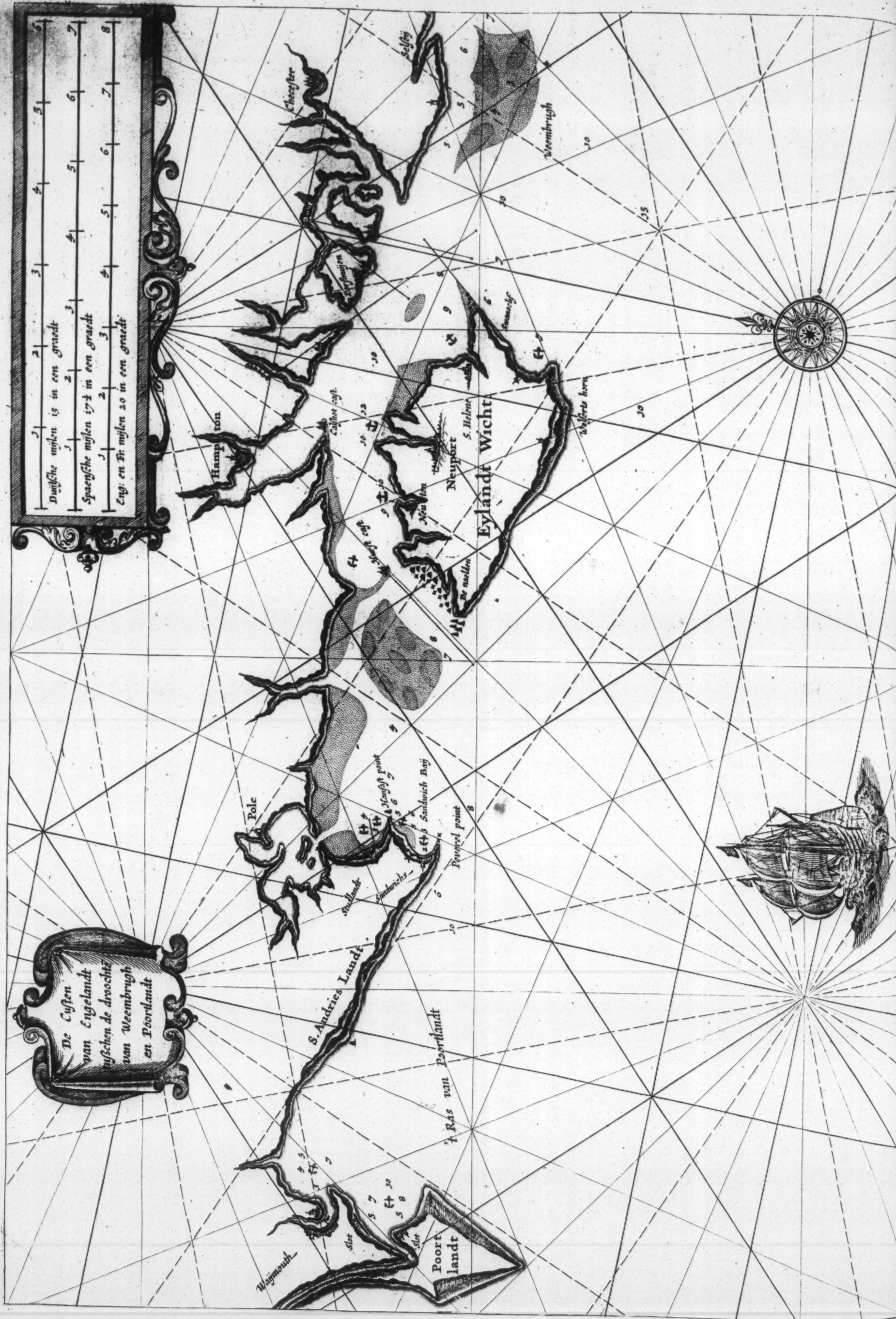
At both the sides of the Island Wight men may saile within it, and there come to ancker, either under S. Ellens, or before Newport where they will.

For to saile into the eastwards of Wight, you must bring the easter castle that lieth to the eastwards of Portsmouth, over the Lyme-kill (that is, a white spot in the land to the northwards of that castle) and keepe them so one over the other untill that the Culver cliffe come within or under the northeast point of Wight. Then bring the Lime-kill over the east end of Portsmouth, and keepe them so untill that the castle to the westwardes of Portsmouth come to the wood: thus doing, you shall not come neere neither plate nor sand to take any hurt of them, and you shall come so by little and little, before S. Ellens Church. When the castle of Wight commeth without Culver cliffe, & S. Ellens Church come two shippes lengths within the red point, then you shall not come too neere the riff at the point. Or els if you cannot see the Lyme-kill, then keepe the Castle to the westwards

For to saile in at the east end of Wight.



De Cuſten
 van Engelandt
 tuſſchen de droochtz
 van Weembrough
 en Poortlandt



westwards of the Culver cliffe, untill that S. Ellens church come a ships length without the point of the Iland, goe then boldly north-west in, and you shall not come too neere the riffe; and then bring the square tower betwixt the east end of Portsmouth, and the Castle: when the Castle to the westwards of Portsmouth commeth to the east side of the wood, then you shall not (as here before is said) come too neere neither the plate nor the sand to take any hurt of them.

When the eastermost white spotte standeth a shippes length to the westwardes of the Castle, then you are to the eastwardes of the riffe: and when the Culver cliffe is covered or hidden behind the northeast point of the Iland, then are you also within the riffe.

The markes of the little plate are these: there standeth a square Tower within the land, & a Castle on the water side to the eastwardes of Portsmouth, thwart from it lieth the foresaid Lyme-kill: when that commeth to the eastwardes of the foresaid Castle, so that you may even see through betwixt them both, then are you upon the little plate, which at low water is not deeper then ten foot: then standeth the Castle to the westwardes of Portsmouth, at the west side of the wood. But when the foresaid square Tower commeth to the west side to the foote of the Castle, and the Castle by west Portsmouth to the west side of the wood, there it is deepe at low water upon the little plate twelve foot.

When the square tower standeth betwixt the east end of Portsmouth, and the castle, even betwixt the Lyme-pit and the tower, and the castle by west Portsmouth in the west side of the wood, there it is at high water, ten fathom deep.

When S. Ellens Church lieth southwest and by west from you, then lieth the southeast end of the plate northeast and by north from you, and the west end north and by east.

From the point of the road of Newport eastwards, lieth a broad sand alongst the shoare, called Nomans-land, which falleth almost dry at low water, it is so steepe, that halfe a cables length off from it, it is twelve fathome deepe: upon the high land of Wight thereabouts stand two or three mills. If you come so neere the shoare, that the foresaid milles be hidden behind the foresaid high land, you shall not misse to come aground against that foresaid sand; but so long as you can see these milles, you shall goe cleare of it.

The Road of the Cowes is the best Road in Wight. Over against, betwixt that and Calshot castle, lieth a hard sand, neereft the north shoare, lying from thence to the westwardes alongst the fareway, almost so farre as thwart of Newton, called the Brambles; at lowe water and spring tydes it falleth almost dry, and then the sea breaketh much upon it: to the northwardes of it goeth also a channell through, but it is not to be used, but with small shipping.

For to saile in at the west end of Wight, you must runne right in with the Needles, (they are high sharpe rockes as mastes lying at the west end of Wight) bring then the innermost point of Wight, or the Castle that standeth upon the Chindle over against that point called Hus castle, a little without, or to the northwardes of the Needles, saile in there-upon, untill you come to the Needles, leave them then on the starboard side of you, and run in within a cables length alongst by them for to avoid the banckes which ly off from the chindle to the northwardes of the Needles, of the west end of Wight almost to the Needles. Betwixt the banckes called the Swingells, and the Needles, it is not very broad, and at low water five fathom deepe. When you saile in here, you must cast your tydes well. The fore-flood falleth strong upon the Needles, and the ebbe so the contrary very strong upon the banckes. When you are then come within the Needles, then edge a little more off from the shoare unto Hus castle that standeth upon the chindle, for to avoid some rocks which ly alongst by the Iland under water. Being come within the Castle or Chindle, there it is wide & broad, leave two third parts of the channell on the larboard side, & one third part on the starboard side, saile so in untill you come before the village Newton, and ancker there in nine or ten fathom, or els saile forth (if you will) about the point of the Cowes, and ancker there before the haven of Newport in tenne or twelve fathom, there is the best road, and

West. Water. ij. Booke.

the best lying of all the roads in Wight. The haven or road before Newport lieth from the foresaid Hus castle upon the chindle northeast and by east, and east-northeast about two leagues asunder.

From the Needles of Wight west & by south about three leagues, lieth the point of S. Albons land, called Peverell point, from it ly off some little rocks to the eastwards. A little to the northwardes of that point is a Bay called the Bay of Sandwich, there is a good road for them that are bound to the westwardes; If you will goe to ride there comming from the westwardes, you may take the founding of S. Albons land, and runne aboard the point in foure or five fathome at halfe flood, and you shall take no hurt of those little rockes. Being gotten about the point, edge by it up to the westwardes towards Sandwich. A little to the northwardes of Sandwich in the Bay, lieth a round hommock, and thwart of it somewhat within the land standeth a mill; bring that mill to the south side of the round hommock, and saile so in untill you come in foure or three fathom, and ancker there so deep or should as you will, there it is good lying for south-west or south-south-west windes.

A little league north and by east from the foresaid point, right west from the Needles of Wight, lieth another point, called Handfast point, to the northwardes of it lieth a little towne called Studland, before it is also a good road. Vpon the outermost part of that point, is a hole through the land, where men may see through, and a little without the point standeth a high steepe rocke like a mast, almost like the Needle at the west end of Wight. For to come to ride before Studland, you must saile about the second point, with the hole or the steepe rocke, in foure or five fathome, and go in west-northwest towards Studland: a little to the southwardes of it lieth a little valley, bring that west-southwest from you, and goe towards the shoare, in foure or three fathome and a halfe there is the best road, and lying there, you may see the foresaid hole in the point.

A league to the northwardes of the foresaid point with the hole, lieth the haven of Poole; for to saile in there, comming about the foresaid second point with the steepe rock, you must goe on northwest, or somewhat more northerly, and then you shall see right a head of you, a high flat hill, which standeth higher then the other land thereabouts, keepe that betwixt the two shoares, and runne in so right with it. If you must turne to and again, then spare not to use your lead, and runne not further over to the westwardes, then that the flat hill come to the west land, so soone as it beginneth (as it were) to touch it, you must cast about, or else you should be fast aground: And after you have cast about, runne not further over to the eastwardes, then that the foresaid high flat hill commeth even to the east sand hill, which is a high, gray, and sharpe sand hill, lying at the east side. If you keepe these foresaid markes in this manner, you shall have there going in at halfe flood, water enough, there remaineth upon the shouldest at low water, ten and eleven foot, but it floweth there no more then five foot up and downe. It floweth there twice in a tyde. A southeast & northwest moone maketh there full sea: also a south and by east and north and by west moone once more, that commeth to passe by reason of the fore-ebbe that commeth out of Wight. When you come within the entry, goe then north-northeast on, and keepe the beacons that stand on the eastland, on the starboard of you, and run indifferent close alongst by them. The shoares are on both sides steepe, and the channell is not wyde, without the channell it is shold or flat. This is Pilotes water.

From the west end of Wight to the point of Portland, the course is west-southwest eleven leagues, but from Dun-nose, the southernmost point of Wight, west and by south thirteene leagues.

If you will goe to ancker under Portland (comming from the west) then runne within two cables lengths, or a shot of a cast peece about by the point of Portland, and being come about the second point, edge up to the westwardes, untill you come before the castle, and ancker there in 7, 8, 9, 10, or 11 fathome, so that the point of Portland doe ly south

F

and

Road under
der Port-
land.

and by east, and southsoutheast from you, there you shall ly landlockt for a south and south and by east winde. With a southwest and a southsouthwest winde, men must bee very mindfull of the terrible rippeling of the race of Portland, which beginneth a little to the eastwards of Portland, and endeth a little to the westwards of S. Albons. The ground in that race is also very uneven, and shold, sometimes seven, otherwiles ten, and also fiftene fathome deepe.

About a league to the northwards of the road of Portland, lieth a little Towne called Waymouth with a tyde-haven; before it men may ancker in foure or five fathome.

Of the tides and course of the streames.

Thwart of Wight, before Dunnose, a south and by east moone maketh full sea.

At S. Ellens and the Cowes a southsoutheast moone.

At Hampton at the kay, a south and north moone.

Within the Needles of Wight a f. e. & by f. moone.

Before the haven of Poole a southeast & northwest moon maketh high water: also a south and by east and north and by west moone.

Thwart of Portland in the channell a southsoutheast and northnorthwest moone.

From Portland to Wight the flood falleth east and by north, and the ebbe west and by south.

Depths.

In the offing thwart of Wight it is deepe 38 fathome, in such depth men may see the land.

In the channell betwixt Portland and the Caskets it is 40 fathome deep, when it is cleare weather men may see the land on both sides: the neerer England the showlder, towards the Caskets it is deepest.

Courses and distances.

From Dunnose the southermost point of Wight, unto the Needles of Wight, west and by north, and west-northwest 4 leagues.
From the west end, or the Needles of Wight, to the point of S. Albons land west 4 leagues.
From the Needles of Wight to Portland west and by south, and westsouthwest 11 leagues.

From Wight to Deepe eastsoutheast 37 leagues.
From the east end of Wight to Struysaert southeast somewhat southerly 29 leagues.
From Wight to the Caskets, southwest and by south 20 leagues.
From Portland to Seynhead southeast and by east 37 or 38 leagues.
From Portland to the Caskets south and by east 13 leagues.
From Portland to S. Paul de Lion f.w. & by f. 40 leagues.
From Portland to Vshant southwest 53 leagues.

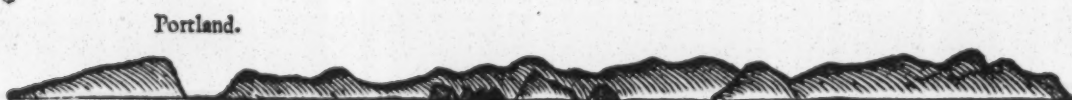
Heights of these lands.

Dvnose the southermost point of Wight lieth in 50 degrees 36 minutes.
Portland lieth in 50 degr. 30 min.

How these lands doe shew themselves at sea.



Thus sheweth the Iland Wight, when you saile alongst by it, being three or foure leagues a seaboard the land.



Thus sheweth S. Albons land with Portland to the westwards of it, when you saile alongst by it, being to the eastwards of Portland.



Thus sheweth Portland when you come from westwards.



Thus sheweth Portland, when it is north and by west from you fixe leagues off.



Thus sheweth Portland when you come from the eastwards.

C H A P. V I.

The Coast of England betwixt Portland and the Steart.

Iland Cob.

From Portland to Exmouth the course is westnorthwest thirteen leagues; betwixt them both lieth a little Iland close by the land called Cob. Before Exmouth men may ride (at the south end of the Chindle, which lieth before the haven) in seven or eight fathome, so that the rockes of Tomanstones doe come to ly south and south and by east from you, there it is good ground, and landlockt for a south wind.

Five leagues south and south and by west from Exmouth lieth Torbay, and lieth from Portland west, and west and by south distant thirteen leagues.

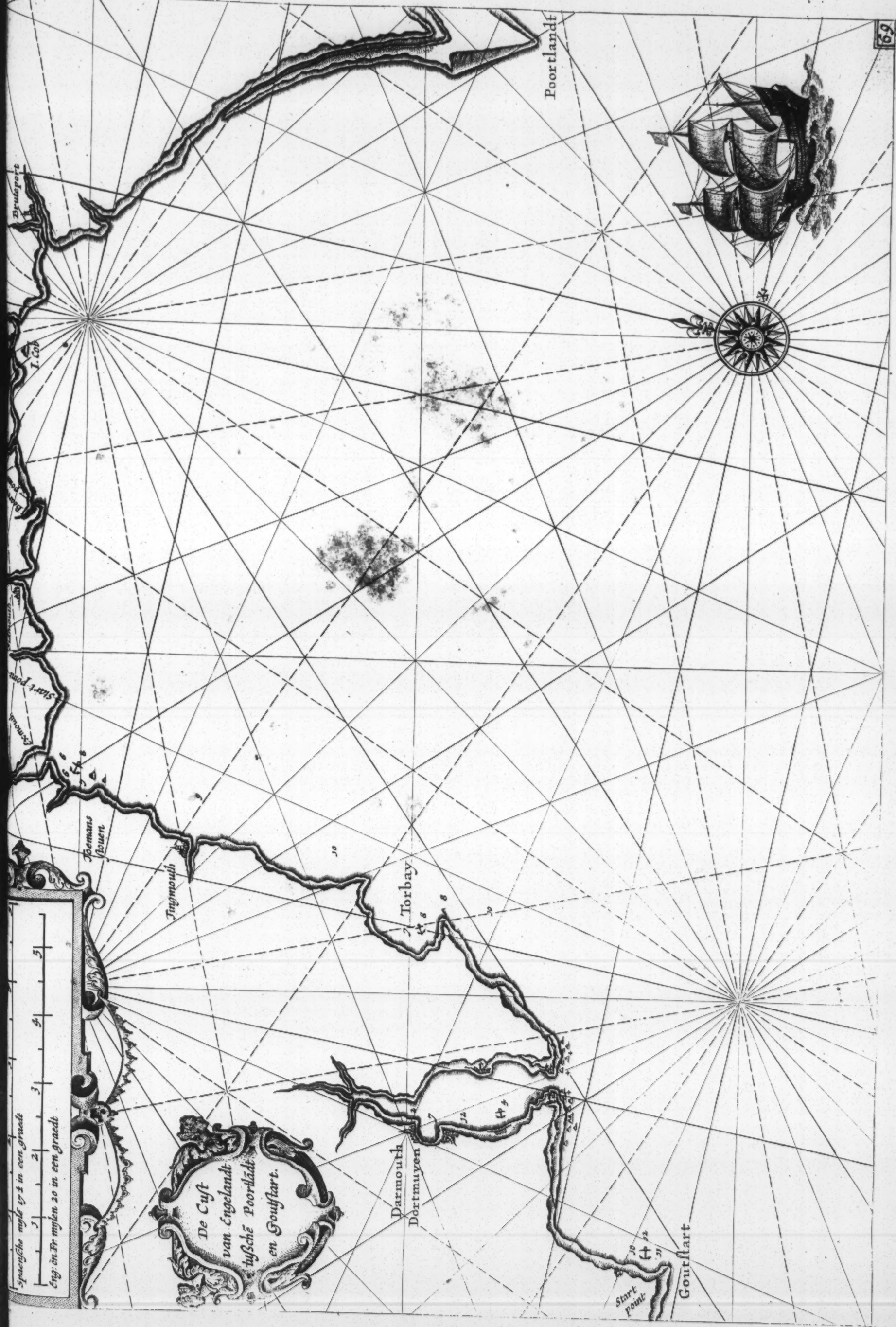
For to goe into the road of Torbay, you must bring the west point south and by east and southsoutheast from you, and ancker there in seven or eight fathome, you shall ly land-lockt for south and southwest windes. At the north-east side of the bay is also a tyde-haven, before it, is good ancker ground in foure or five fathome, according as you will ly neare or farre from the shoare.

To the north point of Torbay lieth a little Iland you may saile through betwixt it and the land.

Three or foure leagues southwards, or to the westwards of Torbay, lieth the haven of Dartmouth, which hath a narrow entry, lying in betwixt two high lands, upon each side of the haven standeth a little castle, in time of warres they were wont to shut it over with a chaine, on the west side standeth a little Church on the high land. For to saile in there comming from the Steart, or from the westwards, you must run in alongst by the wester land, so farre to the eastwards untill you bring the kay of the village (that lieth on the east side of the haven) in the midst of the entry of the haven, and saile so in, keeping the midst of the haven betwixt the two lands, and you must bee very ready with the boate (if there shold come any foreflaughes from off the high land) for towin. Being come in, edge over to the west side, before the Brewhouse, and ancker there in ten or twelve fathom, or before the village on the east side, where you please.

At the east side of the Range lieth a suncken rock, the markes for to avoid it are these. To the eastwards of Dartmouth is a red point, which below by the water is black, and in the red lieth a white stone, when the white stone commeth over the black point, then are you thwart of the suncken rock; but if you se the kay of the village, & doe as before is said,

Torbay.



De Cuyt
van Engelandt
tusshē Poortlādē
en Goutflart.

Spaensche myle 17 1/2 in een graede
Eng. en Fr. mylen 20 in een graede

said, then you shall not come to neare that suncken rock to take any hurt of it.

Betwixt Dartmouth and the Steart, nearest to Dartmouth, standeth a spire steeple indifferent high and white, called Tackman, that is a very good mark to know the haven of Dartmouth by it.

The Steart lieth from Dartmouth southwest distant three leagues. Under the point of the Steart at the east side is a good road for westerly windes, betwixt the little church that standeth upon the high land, and the point of the Steart, in tenne or eleven fathom, so that the point ly southwest from you.

Of the tides and course of the streames.

IN Dartmouth and Torbay a west and by south moone maketh full sea.

Thwart of the Steart in the channell, a westnorthwest & eastsoutheast moone.

From the Steart to Portland in the middest of the channell the flood falleth eastnortheast and the ebbe westsouthwest.

Thwart of Dartmouth by the land, the flood falleth northeast and by north, and the ebbe southwest and by south.

Thwart of Torbay towards Exmouth in the bay the flood falleth northnortheast and the ebbe southsouthwest.

Of the depths.

THe Steart and the land of Dartmouth men may see them both in five and forty fathome.

Courses and distances.

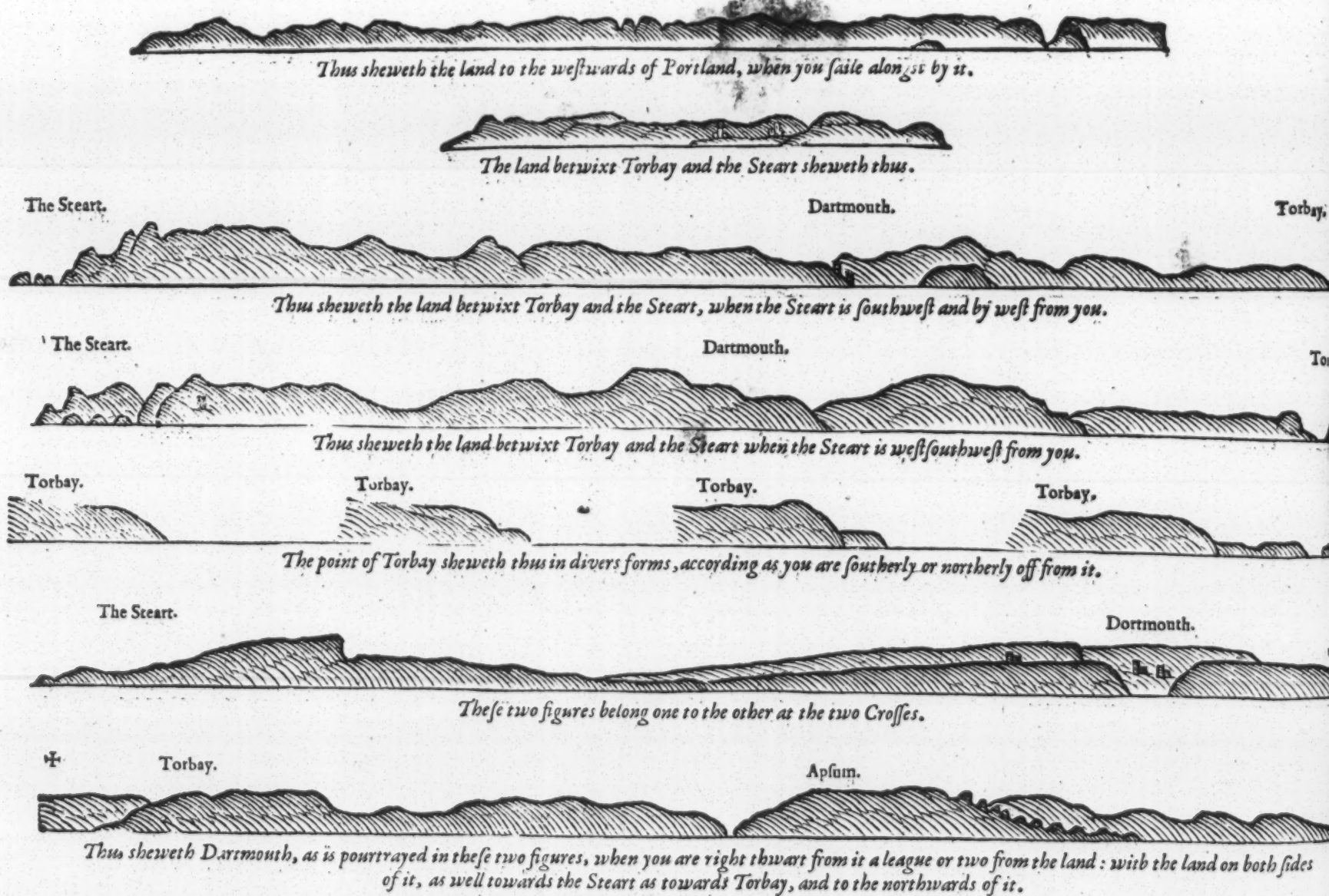
From Portland to Exmouth westnorthwest 13 leagues.
From Exmouth to Torbay south 5 leagues.
From Torbay to Dartmouth southwest 2 leagues.
From Dartmouth to the Steart southwest 3 leagues.
From Portland to Torbay west somewhat southerly 13 or 14 leagues.
From Portland to Dartmouth west and by south 16 leagues.
From Portland to the Steart w.f.w. westerly 18 leagues.

From the Steart to the Caskets e.f.e. 19 leagues.
From the Steart to the Sept Isles, south and by east easterly 24 leagues.
From the Steart to S. Paul de Lion south and by west 29 leagues.
From the Steart to Vshant f. w. and by west 40 leagues.

Heights.

THe Steart lieth in 50 degr. 21 min.
or as some will hold, more northerly.
Torbay lieth in 50 degr. 25 min.

How these lands doe shew themselves at sea.



C H A P. V I.

The Coast of England betwixt Portland and the Lizart.

Salkom.



Alkom is a haven which lieth a little to the eastwardes of the westermost point of the Steart, when you come from the west, it sheweth it selfe open, the west side of it is ragged, and the east side goeth sloping downe, close to the west point lieth a rock, or a rane of rockes, therefore you must give it a good birth, & leave the rockes

on the larboard side: further, you may see all breake that can doe you hurt. Being come within the points, you can take no hurt of neither of both shoares. Vpon the barre, or shouldest of the entry, remaineth at low water with a spring tyde, not lesse then eleven foot water, and againe within, it is at least three fathome deepe.

Six leagues to the westwardes of the Steart, lieth the sound of Plymmouth, at the outermost east point of the Sound lieth a high round rock, called Mewstone, the west point is called Ramehead, betwixt them both goeth in the Sound of Plymmouth northnortheast in, it is broad & deep. A little

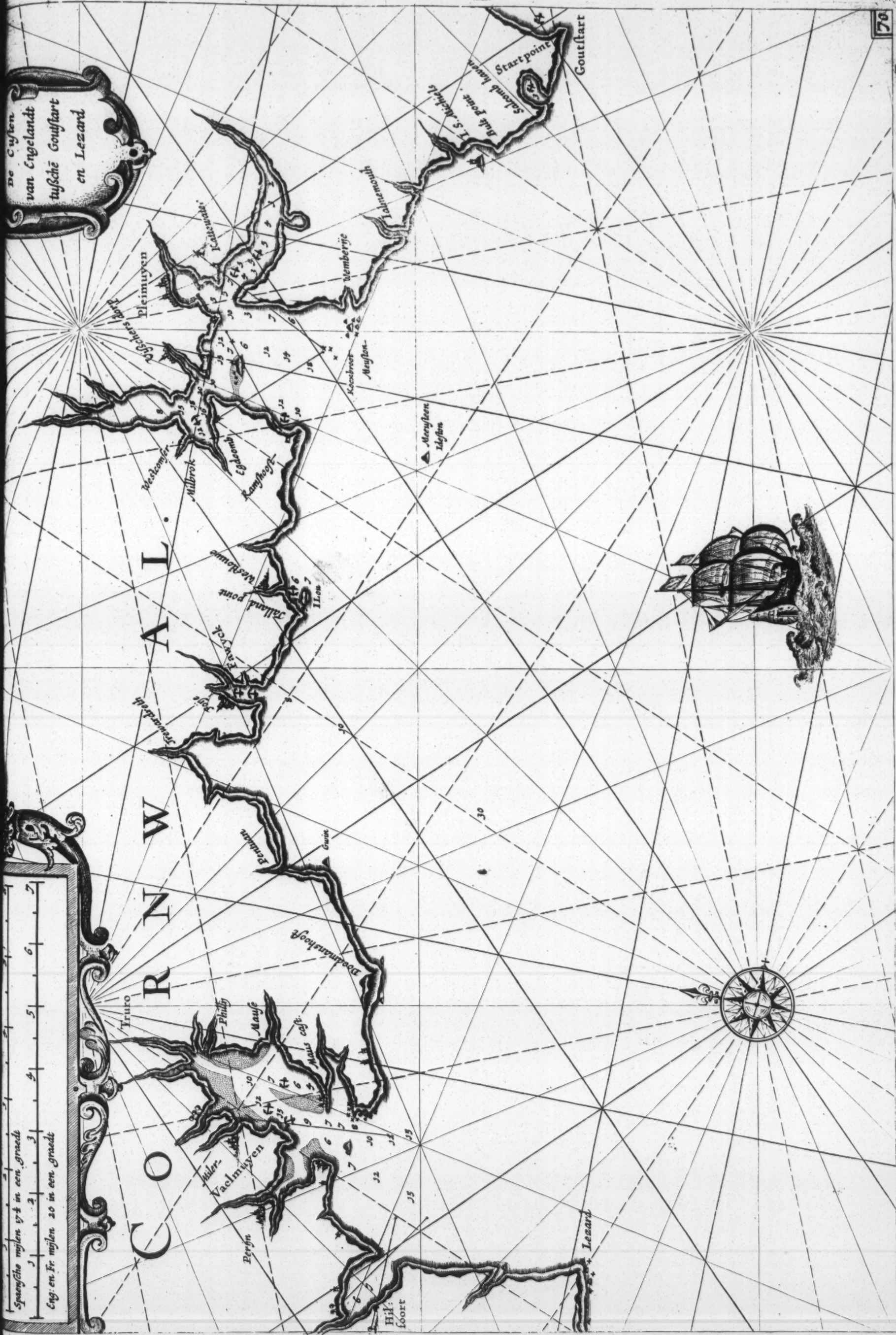
Spanische mijlen 17½ in een graet
Eng: en Fr. mijlen 20 in een graet

C O

R N W

A L

De Cuyten
van Engelandt
tuyfche Gouftart
en Lezard



A little to the northwards of Ramehead is a faire sandy bay, where men may ancker close under the land, in nine and ten fathome. Three leagues south a little easterly from Ramehead, lieth a rock above water, called Eddy-stone. The point of Plymmouth lieth from the Eddy-stone north and by east, and northnortheast, distant about foure leagues. In the Sound, by the land of Plymmouth, lieth a little Iland, which is fast to the west side with a riffe or rane of rockes under water, so that men must saile alongst to the eastwards of it, whether they be bound into Catwater, or into Hamoafe, the west harbrough. If you will goe into Catwater, then runne in betwixt the Iland, and the point on the east side in with the land of Plymmouth, untill that you see Catwater open on the starboard side of you, goe then in to the eastwards betwixt the point of Plymmouth, and the foresaid east point on the starboard side of you, leaving the most part of the channell on the starboard side of you, untill you come within the point, and ancker there right against that high steepe norther land, there it is at low water with an ordinary tyde, foure and five fathome deepe.

When you saile into Catwater you must take heed, and give a good birth to the souther point of the entry of Catwater, for there lieth off to the westwards from the foresaid point, a ledge of rockes under water, neere about two cables lengths from the land, and upon the point of the ledge or showld, lieth a buy where is at halfe flood about twelve foot water, which buy you must leave on your starboard side in going into Catwater, and when you have Catwater altogether open, you may runne into the eastwards, leaving (in the entry of the harbrough) two third parts of the channell on the starboard side, as before is said, because the south shoare is somewhat flat off, there lying a sandy banck, which reacheth to the second point of the south shoare of Catwater.

A little to the eastwards of that foresaid little Iland, lieth a rocke under water, upon which it is at low water not deeper then two fathome. For to saile within the Iland, you may goe in to the eastwards, or to the westwards of the rock, according as occasion shall serve. If you will saile into Hamoafe, to the westwards of the rock, then take the sounding of the Iland in foure or five fathome at low water, and runne in so by it, untill that the Fishers Village (lying to the northwards a little within the land) come to the west side of the valley on the north shoare, then are you runne through betweene the Iland and the rock, and to the westwards of the rock. Within the Iland, upon the land of Plymmouth, standeth a wall or hedge, when as you see that on ending, and the chappell of the foresaid Fisher Village commeth to the north side of the valley, and Catwater commeth open; then doe you run over the rocke. Betweene the Iland and the maine, men may ancker in twelve and thirteene fathom.

If you bee bound into Hamoafe, you must runne in betweene the Iland, and the land of Plymmouth, and then in amidst the channell between the two lands, untill that the entry of Hamoafe be open, runne then into the northwards, as the channell leadeth, untill you come in about the west point, and ancker there in sixteen, fifteen, and twelve, or ten fathome. In the narrow it is fifteene, sixteene, seventeene, and also twenty fathome deepe, and betweene the Iland and the maine, eight, nine, tenne and twelve fathom.

About a halfe cable length to the eastwards of the east point of the passage way going into Hamoafe, lieth a suncken rock under water, called the German, about two great ships lengths from the shoare, and at low water hath not above foure foot water upon it. And when men doe come any thing neere this foresaid suncken rock going into Hamoafe, either with the flood or the ebbe, the tyde will set them right upon it, if it bee calme. Therefore for to avoid it, men must (with calme weather) give this foresaid suncken rocke a good birth, untill they bring the houses of the Fisher Village called Stone-house, open of the easter point of the passage way, and then run in over towards the north shoare, untill they have hidden the Iland in the foresaid easter point of the passage way, for to avoid a suncken rock that lieth off to the eastwards from the north point of the

Beach of the west side of the passage way, a halfe cables length off, and then run in amidst the channell into Hamoafe. Vpon this foresaid suncken rock at low water, is not above three or foure foot water.

In the Sound of Plymmouth, not farre to the northwards of the Mewestone, ly two or three suncken rockes, upon which remaine at low water, not more then three or foure fathome water, the marks of them are these: to the eastwards of Plymmouth standeth a Tower with a Mill, and to the westwardes of the foresaid little Iland standeth a Gentlemans house, when the little tower or turret of that house commeth over the point on the west side of the Iland, and the foresaid Tower and Mill to the eastwardes of Plymmouth come one over the other, then are you upon the innermost suncken rock or showld, which is at low water four fathome deepe. But when the point of Hamoafe commeth even without the point to the westwardes of the Iland, and the foresaid tower and mill also one in the other, then are you upon the outermost rock; where it is at low water and spring tyde, three fathom and a halfe deepe.

From Ramehead westsouthwest five leagues, lieth Foy, and betwixt them one the coast lieth a little Iland, a little to the eastwardes of a point called Talland point, thwart of west Louwe called Low Iland, you may ancker there to the eastwards of the Iland in five or sixe fathome.

Foy is a bad haven, where a shippe may goe in at halfe flood, at the east side of the haven standeth a little Church with a little steeple, & on the west side a white Church somewhat greater then that upon the east land, with a square steeple at the west end of it.

For to saile into Foy, you must have at least a half flood, and run in midst the channell betwixt the two points, and being come within, then chuse which side you will, but the most water is by the west land, between the Stakes and the Tower that standeth upon the west land. Being come within the Stakes (as you come in by the west land) then beare somewhat off presently from the west shoare, almost unto the middle of the channell, neere to the west shoare, untill you come before the village that lieth on the west side, there is a deepe docke, where a shippe that draweth 16 foot water may ly afloat at low water. In the said dock may three or foure shippes ly.

If (when you come in by the east land) you desire to be in the foresaid docke or poole, then saile in untill you come within the stakes, and then edge over off from the eastland, untill you come neere the west land for to avoid a Flat which lieth by the east shoare alongst the haven, and beginneth against the first house of the west village. If it should happen, that you could not lead it in with a sail, then let your ancker fall without the stakes, and warpe in with hawfers, untill you come into the foresaid poole.

You may also saile so farre in, that you may see a wall on the west side of the haven, where lieth a village behind it. A shippes length to the southwards of that wall, it is good lying by the eastland, being morred by foure cables, there may also a ship ride afloat that draweth sixteen foot water. You may also saile further in alongst by that Swach that lieth on the west side, wherein the mill standeth, but come not too neere the north point of the Swach, for there by it lieth a rock under water, being past that you may morre your ship in the midst of the channell, there is best lying for ships that draw much water.

Foure leagues southwest from Foy, lieth the point of Dodman, and two leagues to the westwardes of it lieth the haven of Falmouth. The point of the Dodman is double land with a round hill, which to the westwardes goeth sloping downe, somewhat towards the west end standeth a mill with a sharp tower, and some little houses upon the land, somewhat to the westwardes men may see the castle of Falmouth upon a round Hommocke against the high land: this land is very good to know when you come from the west, or from the Lizart.

Vpon the west point of the haven of Falmouth standeth a castle upon the high land, and in the entry neere the west side, lieth a great rock above water, you may saile about

E. dyssens.

Catwater.

Hamoafe.

The German
a suncken
rock.Suncken
rock.Suncken
rockes.

Low I.

Foy.

Dodman.

Falmouth.

about it on both sides, at the inner side of the east point ly also some rockes off from the shoare. For to saile in there to the eastwardes, alongst by the foresaid rock, you must runne in within two cables lengths, alongst by the eastland, leaving the foresaid rockes on the starboard side, and the great rock on the larboard side, and so saile right in with the high land that lieth on the west side within the haven. Within in the haven standeth on the land a white Chalky spot, also a little wood of trees, keepe them over the north point of the foresaid high west land, & saile so right in with them, keeping them so untill you come neere them, you shall finde so at halfe flood, upon the showdest, not lesse water then five fathome, & that betwixt the foresaid Castle upon the west point, and the easter castle that standeth on the east side, within the haven over against it, or a little within the Castles. When you shall then come by that foresaid high westland, runne alongst by it, unto the north end of the same, and ancker there in twelve, thirteene or fourteen fathome. You may also from thence edge over towards the east land, and ancker there under or behind the banck, that lieth off from the easter Castle alongst the middle of the haven, in fixe, seven, or eight fathome; the banck falleth almost dry at low water, and is soft ground, so that the shippes fit in the oase, when they come there aground.

For to saile in to the westwardes of the foresaid great rock, you must take the sounding of the west land, where the Castle standeth upon, in five or sixe fathome, being somewhat within the rock, runne (as before is said) towards the west land. To the westwardes of the rock, it is in that channell fixe and seven fathome deepe at halfe flood, but in the channell to the eastwardes of the rock, seven and eight fathome.

Foure leagues south & by west from Falmouth lieth the east point of the Lizart, betwixt them both lieth a haven called Helford, which is little used of shippes. At the south side of the haven lieth a steepe point and on the north side a low sharpe point. Within the haven on the south side, standeth a Gentlemans house beneath at the strand, and upon the hill standeth a tuffe of trees, you must keepe these one in the other, and runne so amiddest the channell into the entry of the haven. On the north side stand also two or three trees, these come a mafts length to the westwardes of a little house that standeth in a white sandy bay, thereupon you may saile in also amiddest the channell; it is a short inlet, being come within, you may ancker in fixe or seven fathome. Vpon the south side standeth also a sharpe Tower, and upon the north side a little Castle upon the steepe land.

The Lizart hath three points, the northermost is called the Black-head, from that to the second the coast lieth southwest and by west, and alongst to the third about west-southwest, or west & by south: from the second or middlemost point, ly to seawardes some rocks a cables length, or a cables length and a halfe off, called the Staggs.

To the northwards of the northermost, or eastermost point of the Lizart, betwixt Helford and the foresaid point ly some rockes a great league off from the land, called the Mannackles, south and by east from the harbrough of Falmouth, and eastnortheast from the foresaid Blacke-head, whereof many of them are above water at low water, and some of them at high water remaine uncovered. Betwixt them and the shoare it is very fowle and rocky, so that men cannot run through betwixt them without great danger.

Hee that commeth out of Falmouth, and is bound to

the westwardes, must not goe more southerly with an ebbe then southfourtheast, or southeast and by south, according as the wind shall be, for to runne cleare of these foresaid rocks.

Of the Tydes and course of the Streames.

IN Plymmouth and Foy a west and by south, and east and by north Moone maketh the highest water.

Thwart of Foy in the channell an e.s.e. Moone.

A seaboard of Falmouth an east and by south, but in the haven of Falmouth an east and by north Moone.

At Helford and at the Lizart; by the land, an eastsouth-east and westnorthwest Moone maketh the highest water.

From the Rame-head to the Steart by the land, within the Eddy-stone, the flood falleth eastsoutheast and the ebbe westnorthwest.

From the Dodman to Rame-head the flood falleth east-northeast and the ebbe westsouthwest.

From the Lizart to the Dodman northeast & southwest.

In the channell betwixt the Lizart and the Steart, thwart of Foy the flood falleth east and by north, and the ebbe west and by south.

Of the depths.

When you have the high land of Plymmouth north from you, you may see it in fifty fathome, it is high double land, and sheweth it selfe first in two hilles. That same high double land within the land, you may see it from thwart of Foy untill you come thwart of Dartmouth.

The Dodman you may see in 42 fathome off from the Lizart to the Steart.

The Lizart you may see in 55 fathome, there the ground is white and red shelly sand.

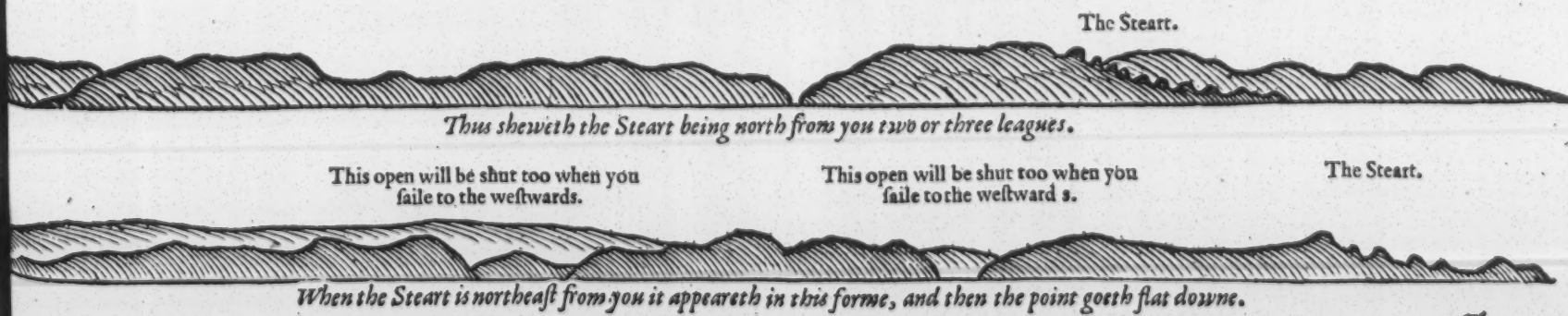
Courses and distances.

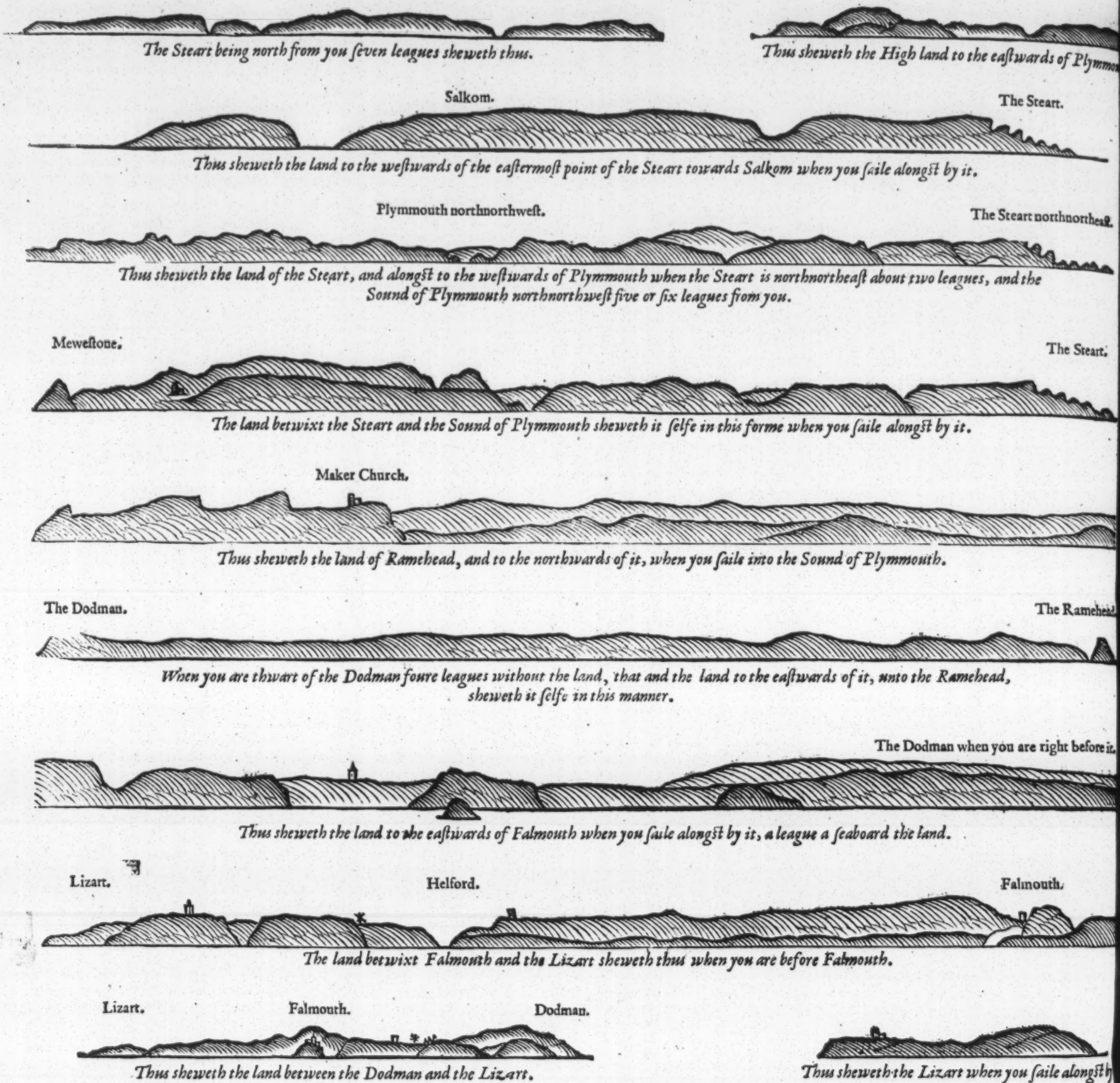
From the Steart to the Rame-head, the course is west-northwest 8 leagues.
 From Rame-head to the Iland of Lowe w.s.w. 5 leagues.
 From the Ile of Low to Foy west 2 leagues.
 From Foy to the Dodman southwest 4 leagues.
 From the Dodman to Falmouth west and by south, and westsouthwest 4 leagues.
 From Falmouth to the Lizart south and by west 4 leagues.
 From the Steart to the Eddy-stone west or a little more northerly 7 or 8 leagues.
 From the Eddy-stone to the Rame-head north a little westerly 3 leagues.
 From the Rame-head to the Dodman w.s.w. 8 leagues.
 From the Dodman to the Lizart southwest 7 leagues.
 From the Steart to the Lizart w. and by s. 20 or 21 leag.
 From the Lizart to Garnsey east and by south 37 leagues.
 From the Lizart to the Sept Iles, or seven Ilands the course is southeast and by east 27 leagues.
 From the Lizart to Vshant south 29 leagues.
 From the Lizart to C. de Finisterre s.s.w. 153 leagues.
 And that course goeth about 5 leagues without the Cape.
 From the Lizart to Teneriffe southsouthwest 466 leagues.
 From the Lizart to Tercera s.w. and by w. 386 leagues.

Heights.

The Lizart lieth in 50 degrees.

How these lands doe shew themselves at sea.





C H A P. V I I I.

The Coastes of England from the Lizart and the Lands end of England, unto the Cape of Cornwall and Silly.

The Lizart



He Lizart is a lowe point, where some rockes ly off from it, upon the south end standeth a Tower, and upon the high land towards the north end standeth another tower which is sharpe.

Two leagues south and by east from the middle point of Lizart lieth a blind rocke, where the sea with stormy weather at lowe water beats mainly upon.

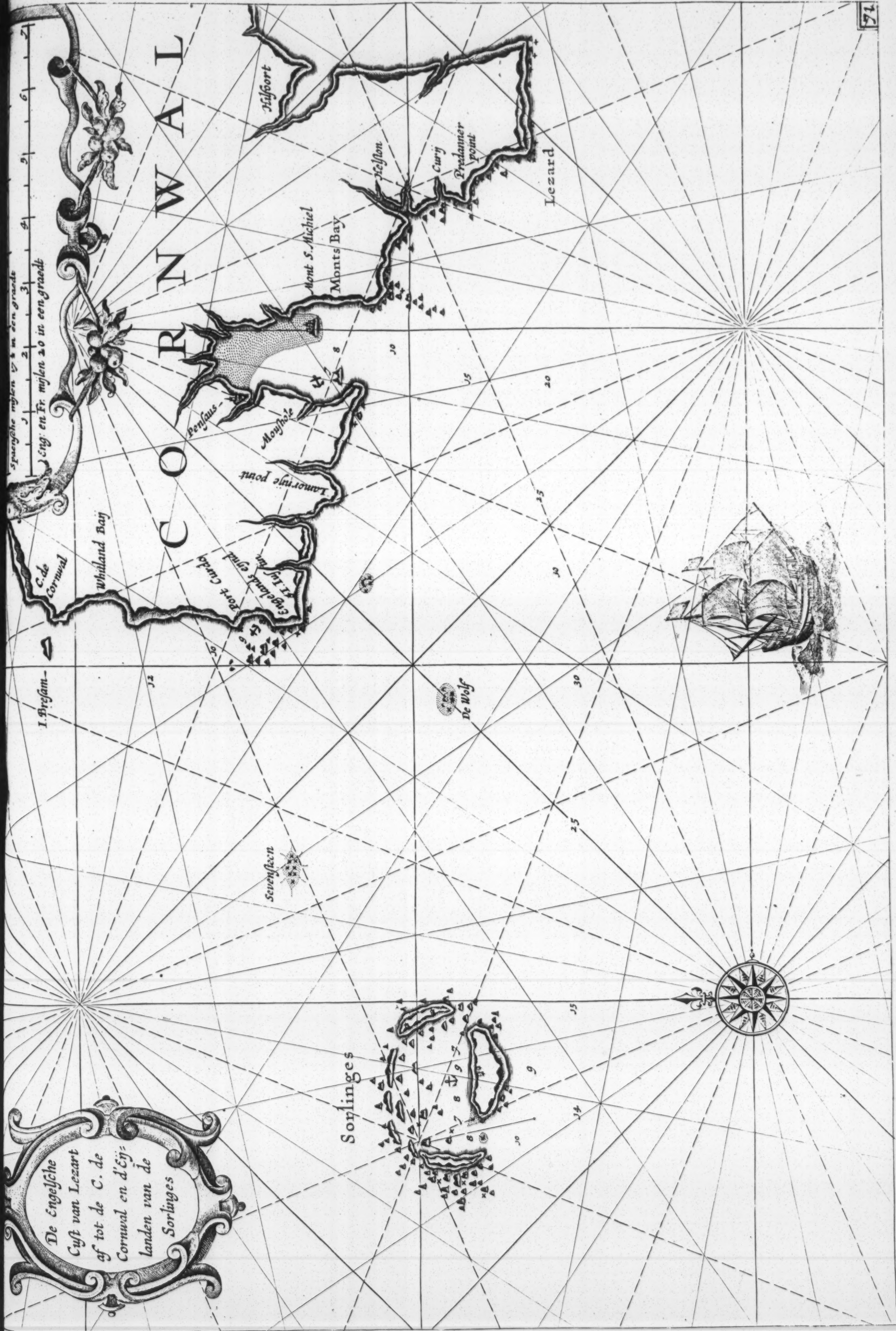
About five leagues northwest from the Lizart, lieth a great Bay, called Mounts-Bay, at the west point of that Bay lieth a little Iland, whereupon stand two little short towers like beakons, at the east side in the bay lieth another high little Iland, whereupon standeth a Castle, called S. Michiels Mount. At the east side of this Bay, lieth a great rane of rockes, which ly off into sea a league from the land, whereof men must take good heed in dark weather; from thence to the southward towards the Lizart, the coast is all alongst full of rocks, but these ly not so farre off from the shoare.

Mounts-Bay.

S. Michiels Mount.

For to saile into Mounts-Bay, comming from the Lands end, or from the Lizart, and being to the westwardes of the foresaid rane of rockes, you must runne in right with the little Iland called S. Michiels Mount, so long untill you com within a halfe league of it, then edge up to the westwardes towards the Bay, untill that you see that foresaid little Iland, with the two little short towers at the west point, leave it on the larboard side, and runne in close alongst to the northwards of it, for it is very cleane, but leave the Castle a great waies on the starboard side, being fowle about it. Being come within the little Iland at the west point, you shall see within it a great sandy bay, ancker there in seven or eight fathome. Eastfourtheast and southeast winds doe blowe there right open in, for all other winds you ly there land-lockt.

Foure leagues to the westwards of Mounts-Bay lieth the Lands end of England, and lieth from the Lizart westnorth-west distant nine or ten leagues. About a league southeast from the Lands end, a halfe league without the land, lieth a funcken rock, which at lowe water commeth even above water. Thwart of that rock standeth a Church upon the land, when you can but even see that, over the high land, then are you thwart of the foresaid rock, to wit even as far from the land as the rock, but when the Church is hidden behind



Spanische mijlen 12 in den graadt
Eng. en Fr. mijlen 20 in een graadt

behind the high land, that you cannot see it, then are you neerer to the land then the rock, or within the rock towards the land, and so you shall goe through betwixt it and the land.

Vpon the Lands end of England ly two round hills, when you get sight of them, you shall see upon the highest a spire tower, comming somewhat neerer, you shall see upon the outmost end in the low land, another spire tower, thereby is the lands end reasonable well to bee knowne. The ground is thereabouts whitish sand, with red sand, and mingled with shelles.

From the Lands end unto the Cape of Cornwall, or to the little lland Bresam, lieth the coast most north about five leagues.

Rocks at the Lands end.

At the Lands end ly some rockes, you may run in within them as well to the northwards as to the southwards, and come to ancker in eight or nine fathome: to come in there from the southwardes it is narrowest, and tenne fathome deepe: from the northwardes it is best and broadest, and eight and nine fathome deepe; but on the left side close to the north point of the Lands end lieth a suncken rocke, which you must avoid when you saile in there.

Silly lieth from the Lands end westsouthwest distant eight leagues, but from the Lizart west, sixteene or seventene leagues.

Seven-stones.

Betweene the Lands end and Silly ly the Seven-stones westsouthwest, and west and by south four leagues from the Lands end, and northeast and by east, and eastnortheast, almost three leagues from Silly, that is, a rane of rocks which come not above water, but alwaies breaketh upon them.

The Gulfe.

Southsouthwest and southwest and by south three or four leagues from the Lands end, and five leagues east from Silly, lieth also a sharpe rock called the Gulfe, which cometh at halfe tyde above water, and is round about indifferent cleane.

For to saile into Silly.

Silly is divided into divers llands, alongst the west side lieth a great multitude of rocks, men may goe in there through divers channells or sounds, but the souther channell is the best. About the middest of the entry of that found or channell, lieth a suncken rock, men may goe in on both sides of it, but to the eastwards of it is broadest & best. For to saile in there comming from the east, you must run alongst by the east land in eight or nine fathome, and you shall so runne alongst to the eastwards of the foresaid suncken rock, which lieth against a sconce a little without the Castle. The markes to avoid this rock, are two rocks which ly on the west side within the haven, the one (to wit the innermost) is somewhat greater then the other. If you bring them one in the other, or the northermost a little to the eastward of the southermost or the smallest, so that you may even see through betweene them, and saile so right in, keeping them so, you shall so saile farre enough to the eastwards of the rock. If you come from the southwards or the westwards, and are bound into Silly, then run towards the eastland so long untill you bring the two foresaid rocks within the haven, one in the other, or even through one

another, saile then so in, and then you shall runne (as before is said) cleare of the foresaid suncken rock, thwart of the sconce. At the inner point of the lland, at the east side of this souther channell, lieth another suncken rock, whereof men must take heed. For to avoid it, you must run so long to the northwards, upon the markes of the foresaid two rockes, untill you may see the little tower in the sandy Bay, then goe to the eastwards, unto the Bay, and ancker there in eight or nine fathome. When you come nere Silly upon the louth side, you shall see a square tower in the sandy bay or valley, and to the westwards many little llands & rockes. The ground of Silly is somewhat stony with some red shels.

Of the tides and course of the streames.

IN Mounts Bay, and at the Lands end of England, a westsouthwest and eastnortheast moone maketh high water.

In Silly a southwest and by west moone maketh full sea.

A Seaboard of Silly in the channell likewise a southwest and by west moone.

In the entring of the channell a southwest and northeast moone.

From Silly to the Lizart the flood falleth northeast and the ebbe southwest.

In what depths men may see these lands.

Silly men may see on the south side in 52 fathome, and the ground there is stony, with some red shells.

The Lands end of England men may see also in fifty two fathome.

Courses and distances.

From the Lizart to the Lands end westnorthwest 9 or 10 leagues.

From the Lands end to Silly westsouthwest 8 leagues.

From the Lizart to the Gulfe the course is west & by north 10 leagues.

From the Lands end to the Gulfe the course is southsouthwest 3 leagues.

From the Gulfe to Silly west 5 leagues.

From Silly to the Caskets east somewhat southerly 56 leagues.

From Silly to Vshant the course is southeast and by south 37 leagues.

From Silly to C. de Finisterre, south and by west westerly 150 leagues.

From Silly to C. Cleare in Ireland northwest and by north 40 leagues.

From Silly to Waterfoord north somewhat westerly 40 leagues.

Heights.

The south side of Silly lieth in 50 degrees, or a little more.

How these lands doe shew themselves at sea.



Thus sheweth the land betwixt the Lizart and the Lands end, when the Lizart lieth about east and by north, and Mounts Bay north from you.

Mounts Bay.

The Lizart.



Thus sheweth the Lizart being east from you foure or five leagues.



Thus sheweth the Lizart when it is five or sixe leagues east and by north from you.

Thus

Lands end northnorthwest.

Mounts Bay northeast by north and northnortheast.

Thus sheweth the Lands end, and the land to the eastwards of it, when it is northnorthwest, and Mounts Bay is northeast and by north and northnortheast from you, being a league from the land.

Lands end sheweth it selfe thus, when you come in right with it out of the sea.

The lands end being east from you, sheweth thus.

East.

The Lands end of England.

Thus sheweth the lands end of England when it lieth southeast and by south seven or eight leagues from you, and the round hill to the northwards of it east, then you may even see the low land betwixt them both.

Thus sheweth Silly being eastnortheast from you.

When Silly is southeast from you it sheweth thus.

When Silly is east five or six leagues from you, it sheweth thus.

When Silly is southeast and by east from you, it sheweth thus.

Silly being southwest from you, sheweth thus.

Of the depths and many sorts of groundes before and in the channell betweene Silly and Vshant, and thereabouts.

Southwest and by south from the Seames seven leagues it is deepe seventy two fathome, the ground pale white course sand, like small fretted little stones, with little peeces of queenes and shelles with gray flat little stones, and white glistering needles, saile from thence north and north and by east, and then you shall fall well to passe with Vshant.

About two leagues southwest from the Seames it is deepe fifty two fathome, the ground there is white, yellow, rough, and somewhat longish sand, with a little red small shelly sand, with many gray crompled things, and some small white glistering points of needles. If men did finde there seventy or eighty fathome, they would judge it to bee good channell ground.

Westsouthwest from the Seames, so farre from the land, as men may but even see the Sheetes from the poop, with cleare sight, it is 54 fathom deep; the ground is red, yellow, white and black peeces, like parings of cheese, and a little course red sand mingled withall.

West & by south eight or nine leagues from the Seames, in 65 fathome, the ground is white yellow, with a little red small shelly sand, with some peeces of shells and queens not very great, with much white and yellow something long sand, and small white things like points of needles, like as men finde in the channell.

Seven leagues southwest from Vshant, or thereabouts, that men may even see it from the poop, having cleare sight in seventy fathome, there the ground is white and yellow course sand, with some peeces of queenes shelles, and some peeces of white thin shells, with some gray flat ragged stones.

Southwest and by west from Vshant, about nineteene or twenty leagues, in 78 or 80 fathome, the ground is white and yellow course sand, with small glistering needles, with white peeces of queenes shells, and gray and yellow flat stones, and little peeces, like as it were of Oyfter shelles.

West and by south from Vshant 21 leagues, in 68 fathom,

West. Water. ij. Booke.

the ground is red, yellow, and black, mingled with a little white round small sand, like shelly sand. But in 80 fathom, 21 leagues west and by south off from Vshant, the ground is yellow and shelly, with some gray and crompled little needles, like ends of small ry.

In eighty fathome twenty four leagues from Vshantwest Vshant. and by south, men finde rough, great sand, with many sorts of shelles red, white, yellow, and gray, with peeces of queene shells.

From Vshant west 16 or 17 leagues, in 75 fathome, the ground is white and yellow course sand, with peeces of thinne white shelles, and gray peeces of queenes shells, like as it were of Oyfter shells, with small white glistering things like needles.

Eight or nine leagues from Vshant it is deepe seventy fathome, the ground red, white, yellow, and gray shelly sand, with red, yellow, and black peeces of shelles, and small red, yellow, black, and gray stones, with some small white things like needles.

Eight and forty leagues west and by north from Vshant, and fifty leagues westsouthwest from the Lizart, or thereabouts, it is deepe 95 fathome, the ground, red, yellow, and black sand, with small white round shelly sand, & some little peeces of shelles, and queen shells, with some peeces of thin shells.

Three and thirty leagues west and by north from Vshant, and 27 leagues southwest and by south from Silly, in 95 fathome, the ground is gray, red and yellow, mingled with small black sands, with darke, red, white, and yellow peeces of shells, to wit, gray and red shelly sand. An eastnortheast course from this ground off, is the best, it is in the height of about 49 degrees.

Four and twenty leagues west, or west and by north Vshant. from Vshant, and south and by west from Silly 21 leagues, in eighty fathome, there the ground is white, gray, red and yellow, fine small shelly sand, with little red & white peeces of little shells, to see to like bruised mustard seed in the height of 49 degrees.

Seven or eight leagues west and west and by north from Vshant.

G 2

Vshant

Vshant in 68 or 70 fathome, there the ground is white and yellow, small shelly sand, mingled with many gray crompted little things, like needles.

Vshant. About thirty leagues somewhat more northerly from Vshant, in 90 fathome, the ground is small white rough, & somewhat long sand, mingled with a little red and yellow, and some glistering little things like needles, with two or three peeces of white gray shells. If you goe on from thence northeast and by north, untill you come in 55 fathome, there the ground is yellowish white course shelly sand, with white peeces of shels; then you may see Silly ly nine or ten leagues north or somewhat more westerly from you.

Vshant. Westnorthwest from Vshant 21 leagues, and southwest
Lizart. and by south from the Lizart 27 leagues, in eighty fathome, the ground is gray and red shelly sand, there commeth also on the lead, a little peece or two of white or gray queene shels, with yellow and red peeces of shels, also peeces of perriwinckles.

Nine leagues northwest and by north from Vshant, the ground is white and yellow rough shelly sand, with gray crompted glistering little things like needles, there come also on the lead, little things like small strawes. If you goe on northeast from thence, you shall fall with the Steart.

Vshant. Twenty leagues northwest and by north from Vshant, and
Lizart. sixteene leagues southwest somewhat southerly from the Lizart in eight & sixty fathome, the ground is white yellow and red small round sand, with some white glistering little things like needles, with one or two little gray crompted things like needles, and two or three little peeces of little white shels.

Vshant. Nineteene leagues northnorthwest from Vshant, and
Lizart. twelve or thirteene leagues southsouthwest from the Lizart, it is eight and sixty fathome deepe, the ground is there all manner of ragged stones, gray, red and black, with red peeces of shels, and some gray crompted little things like needles.

Vshant. Nineteene leagues north and by west from Vshant, and south from the Lizart, it is deepe sixty two fathome, the ground is white and course shelly sand, with white and gray crompted little things, like needles with white peeces of shels, and two or three little stones among.

Silly. Twelve or thirteene leagues west from Silly, or somewhat more northerly, it is deep sixty fathome, the ground is gray and oasie, mingled with small black sand. In some places of the same depth it is white gray, oasie small sand, with peeces of thin white shells amongst, with a little peece or two like parings of cheefe: this ground cannot be gotten up with candle tallow, or other hard tallow upon the lead, but with soft tallow, or butter. In these depths you have no where such oasie ground as there, whereby men may well know that they are on the back side of Silly or England, to wit, west from Silly.

Silly. West from Silly seven leagues, it is oasie gray sand with two or three little peeces like parings of cheefe.

Seven or eight leagues southsouthwest from the Lizart, in sixty fathome, the ground is white grosse with a little red sand, with little shells, and little glistering white things like needles.

Nine or tenne leagues south and by west from the Lizart, in sixty fathome, the ground is yellow peeces of shells, and gray peeces of soft flat stones like parings of cheefe, with some red peeces of shells, without any sand therein.

Lizart. Southwest and by west from the Lizart, and southsouth-
Silly. west from Silly nineteene leagues, it is deep seventy eight fathome, the ground gray yellow and red shelly sand, with redde yellow and blew peeces of shells, with queene shells, and a peece or two like parings of cheefe, or like peeces of Oyster shells, with also two or three glistering little things like needles, in the height of about forty nine degrees and thirty minutes.

Steart. Fifteene or sixteene leagues southwest and by south from the Steart, in 57 or 58 fathome, the ground is peeces of all maner of shells, and queene shells, with a little yellow and white shelly sand, with many sorts of little stones, and gray little peeces, like parings of cheefe, with some crompted, &

some not crompted, but little glistering things like needles, and little things like maggots that are in bakon.

Southsouthwest from the Steart 16 leagues, in 53 fathom, *Steart.* the ground is white reddish shelly sand, with peeces of queene shells, with red, gray little stones.

Southwest from the Steart eight leagues, it is deepe forty fathome, the ground gray and red shelly sand.

Southsouthwest from the Steart thirteene or fourteene leagues, it is deepe 47 fathom, the ground pale muddy sand, with little long things, and little stones.

A great kenning louthsoutheast from the Steart, it is *Steart.* deepe forty fathome, the ground red sandy clay with pits in the tallow.

Southwest eleven or thirteen leagues from the Steart, in fifty fathome, the ground is white and yellow small shelly sand, with some peeces of white shells, with gray and crompted, and also glistering little things like needles. In fine, hee that soundeth much, getteth many and divers sorts of grounds, and sometimes great change in little change of distance of place. But he that soundeth and findeth white shells, with little things like strawes and needles, it is certaine that he is neereft to Vshant: but if he find brandy ground, or black little stones mingled with white little things then is he neereft to Silly.

Hee that soundeth thwart of Vshant, and findeth small *Mark* white sand, and little shells, and small little things oasie and *Vshant* white. Vshant shall then ly northeast from him. If he finde *Silly.* long small little things like needles, then shall Vshant ly southeast from him. But if he be not sure of these grounds, then he shall beare to the northwards: and if hee find deeper water, then he is towards the Seams, but if he finde it shoulder, then he is in the entring of the channell to the northwards of Vshant. If he be between Vshant and the Seams in seventy fathome, he shall finde the ground to be small little stones like black sand of the earth: or els if hee finde the ground to be great red sand, then hee must stand to the northwards untill that he finde the white sandy ground, and long small things, then he may hold himselfe certaine to be in the entring of the channell.

C H A P. I X.

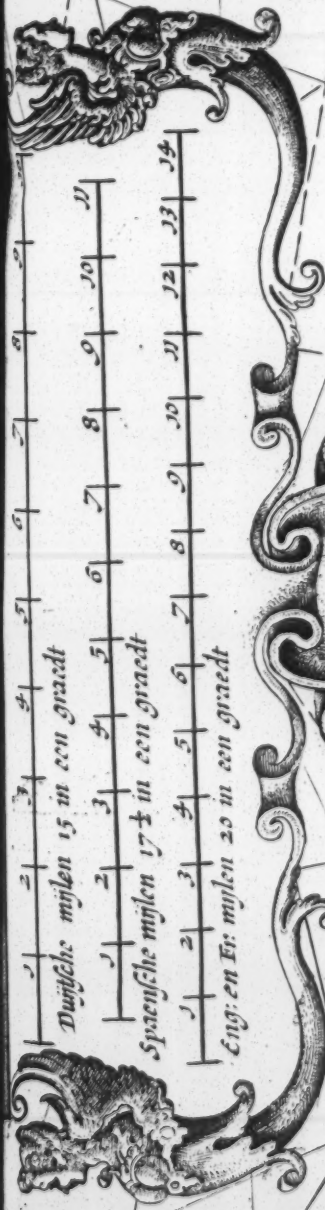
The Coastes of England betwixt the Cape of Cornwall and the Iland Londey.



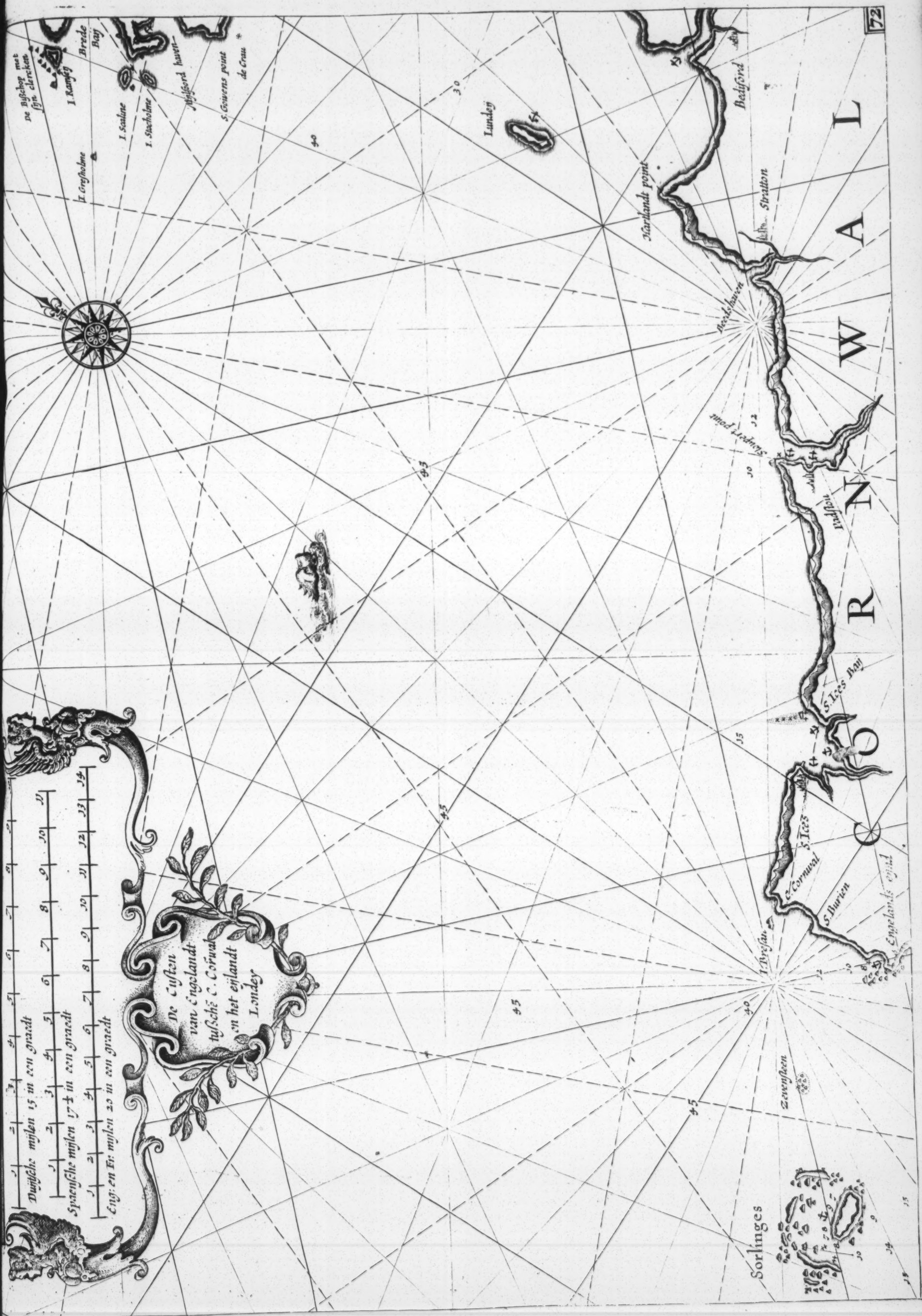
From the Lands end of England to the Cape of Cornwall, the coast lieth north about five leagues, but Silly & the foresaid Cape ly l. w. and n. e. distant about nine leagues. By the Cape lieth a little Iland or rock called Bresam, betwixt it *Bresam* and the Cape men may faile through.

From the Cape of Cornwall unto the little towne S. Yves, *S. Yves* lieth the coast about east and by north, and eastnortheast five or sixe leagues. S. Yves lieth upon the west point of a great Bay, which is about two leagues broad. At the east point of the Bay lieth a little Iland, there lieth off from it a great ledge of rocks a great halfe league thwart off into sea, whereof many of them come at halfe ebbe above water, therefore he that commeth off from the Cape of Cornwall, & will faile alongst the coast towards Stoupert or Padstow, must keepe off (thwart of this ledge) at least a great league from the shoare, because of the foresaid rockes. Betwixt that foresaid little Iland at the east point of the Bay, and the maine land, it is also at many places rocky and fowle, so that one that is not there very well acquainted, may not faile through there without great danger. In the Bay of S. Yves is on both sides good sandy ground, where men may ancker all over, and come so neere the shoares as they will. At the west side of the Bay at the Towne, is a head where small ships and barks do goe in within it, and ly there succoured for northerly winds, but great shippes may not do so, they must ancker without in fixe or seven fathome.

From S. Yves to Hartland point, the course is northeast seventeen or eighteen leagues, betwixt them both about halfe



De Eysten
van Engelandt
tusschē C. Cornual
en het eylandt
Londrey



Stoupert.
Padstow.

halfe waies lieth the point of Stoupert, to the eastwards of it lieth Padstow in a bay where is a very good road in seven or eight fathome. At the west side of that point lieth a sunken rock under water, and upon the point, a great high rock, to the westwards of that point towards S. Yves, are many white sandy, and chalky bayes alongst the shoare, thereby the coast there is very good to be knowne.

Hartland
point.

Hartland point is a point that lies out, four leagues north from it lieth the Iland Londey, which is somewhat a long Iland, it lieth most north and by west, and south and by east. At the east side of that Iland men may ride for westerly winds in fourteene and fifteene fathome, but on the west side the ground is fowle.

Of the tydes, and course of the streames.

Betwixt Silly and Londey the flood falleth northeast, & the ebbe southwest.

In Silly a southwest and by west moone maketh high water.

On the coast of England betwixt the Cape of Cornwall and Hartland point a westsouthwest, and west and by south moone maketh high water.

Thwart of the Iland Londey a west and by south, but on the Iland, an east and west moone.

Of the depths, grounds, and markes for to knowe the land.

Silly may be seen on the north side in 45, 46, and 48 fathome, there the ground is oasie, with some little stones amongst it.

When men are to the northwards of Silly, it sheweth first in two Ilands, upon the eastermost they shall see a tower, or little castle, to the eastwards of the two Ilands, they shall see also two great hilly rockes, and to the westwardes three high black rockes.

Westnorthwest and west and by north ten or eleven leagues from Silly the ground is oasie and soft that men can

scarce get any of it upon the lead, there come some little shells amongst it.

Betwixt the Lands end of England and Londey, in the fareway, it is 45 fathome deepe, the land of Cornwall men may see in 44 fathome.

Three or foure leagues without the land, thwart of Saint Yves, Stoupert, or Padstow the ground is sharpe and rocky, but neerer the land it is all sandy ground.

Betwixt S. Yves & Hartlands point are many white chalky hills alongst the coast, especially neere by Stoupert or Padstow, whereby this coast is to be knowne.

Courses and Distances.

From Silly to the C. of Cornwall northeast 9 leagues.
From the C. of Cornwall to S. Yves east and by north 7 leagues.

From S. Yves to Stoupert point, n.e. and by e. 9 leagues.

From Stoupert to Hartland point n.e. & by n. 9 leagues.

From S. Yves to Hartland point northeast 18 leagues.

From Hartland point to the Iland Londey north 4 leagues.

From the C. of Cornwall to Londey northeast and north-east and by north 27 leagues.

From the C. of Cornwall to Milford in Wales northnorth-east 32 or 33 leagues.

From Silly to Milford northnortheast somewhat easterly 40 leagues.

From the Cape of Cornwall to the rock Tuskar north and by west 40 leagues.

From the Cape of Cornwall to Waterford n.n.w. But from Silly north and by west somewhat northerly 40 leagues.

From Silly to C. Cleare in Ireland northwest and by north 40 leagues.

Heights.

The Cape of Cornwall lieth in
Londey lieth in

50 degr. 25 min.
51 degr. 20 min.

How these lands doe shew themselves at sea.



Thus sheweth the land betwixt the Cape of Cornwall and S. Yves, when it is about foure leagues from you.



Thus sheweth the Cape of Cornwall, when it is east and by south from you, so farre that you may but even see it from the poop.



Thus sheweth the land betwixt the lands end of England, and the Cape of Cornwall or the Iland Bresam, when you are on the back side of the Lands end.



Thus sheweth the land when you are before or thwart of S. Yves, about five leagues without the land.



To the westwards of Stoupert sheweth the land thus, when you saile alongst by it 2 or 3 leagues without the land.



The land to the eastwards of Padstow Stoupert sheweth thus, when it is 2 or 3 leagues east and by north from you.



The land of Stoupert or Padstow sheweth thus, when you saile alongst by it three or four leagues without the land.



When the Iland Londey is north from you, it sheweth thus.



When the Iland Londey is n. n. w. from you, it sheweth in this forme.

The Channell of Bristow, with the Coast of Wales.



Eleven leagues to the eastwardes of Hartland point eastsoutheast from the south end of Londey, lieth the sound of Biddeford, being a bard haven, where many shippes doe saile in & out. A little within the mouth of the haven, it divideth it selfe into two rivers, upon the westermost on the starboard side lieth Biddeford, and upon the eastermost on the larboard side, lieth a towne called Barnestable.

From the point to the northwardes of Biddeford haven, unto Ilfercombe the course is eastnortheast foure leagues, that is a haven where remaineth at low water three or four fathom depth. Before the haven is also good road, in eight or nine fathome at halfe flood.

Eleven or twelve leagues to the eastwards of Ilfercombe, ly two litle Ilands, about two leagues north and south one from the other, called the Holmes, the northermost is called the Flatholme, and the southermost the Steepholme, betwixt Ilfercombe and the Holms (somewhat neerer the Holms then Ilfercombe, lieth a little towne called Mynehead, where many ships do lade.

In the fareway betwixt Ilfercombe and the Holms, on the English side, on the one side, and the banckes on the Welsh side on the other side, in the middest of the channell it is deepe 30, 25, 20, 18, 16, and 15 fathome, the neerer the Holmes, the sholwder water. When men come from the westwardes within the Iland Londey, then they may see the land on both sides, to wit, of England and Wales. The English coast even from the Cape of Cornwall, to the Holmes, is altogether cleane, but the coast of Wales is most all fowle and showld, from the Iland Caldy unto Bristow, with many banckes, sands, and riffes that ly off. The Holmes & the Iland Londey ly westsouthwest and eastnortheast distant nineteene leagues.

He that will saile from Londey to Bristow, must runne alongst by the English coast, untill that hee come within the point of the Naes, for to avoid Naesland, and then forth alongst through between the Holmes, leaving the Steepholme on starboard, & the Flatholme on the larboard side. Men may also with little ships, of little draughts, saile about to the southwardes of the Steepholme, but it is there so showld, that there remaineth at low water no more then two fathome water. Under Steepholme men may ancker where they will in foure or five fathome.

He that commeth off from the Naes, and is bound to Bristow, must stand over to the Steepholme, & run alongst to the northwardes of it. It lieth from the Naes eastsoutheast about seven leagues.

For to saile through between the Holmes, the right and best fareway, you must saile neereft the side of the Flatholme, there it is deepest, with an open wind men may saile alongst so neere by it, without any hurt, that they may cast with a stone upon it. Within, or to the eastwardes of the Holmes, lieth shooting off from the eastland, a great showld, lying off with a great taile towards the west, which (comming from the west) men might easily saile within. For to avoid it, set the Flatholme (when you are passed it) for a mark, you, and keepe it standing so, untill that you shall have sailed about a great league, looke out then for a little sail that shall then at the east shoare, ly neere about thwart you, when the west end of the Iland is southeast from you, then you are right against the point off the riff, then you may saile through betwixt the rocke and the point of Cardief, goe then eastnortheast alongst by the English grounds, which are flat, so that you may saile alongst by them upon your lead in three or four fathome so neere as you will. Upon the land after the Iland stand a Church with a flat towre, when it comes to be about middle in the Iland in a gloop, then shall you be altogether past the English grounds, run then boldly towards the English coast,

and so close alongst by it, as you please, towards Passis or Portshut point. From the Flatholme to Passis point, in the right fareway, it is deepe fourteene and fiftene fathome. The Welsh side you must shun, and take very good heed of it, because it is very uneven and full of steep banckes that are neede to, which at many places do fall dry at low water, you may not come neerer that coast then in twelve fathom, for (sailing towards it) you shall have at one cast ten fathom, and before you can heave the lead againe, you shall sit fast, all alongst from Flatholme til you come to Bristow.

About Passis point men doe ancker in Kings road which is between the point and the river of Bristow, neereft the river there is good clay ground in eight or nine fathome. They that are bound into the river are brought in by the Pilotes. Men may from thence also saile in alongst by the coast to the River of Severne, which is also like the River of Bristow, a faire river to saile into.

For to saile from Bristow to Londey, you must goe away from Passis point westsouthwest untill that the Flatholme do come to beare southwest from you, or els untill that the three foresaid mills upon the south land do stand a like farre one from the other, to wit, that which standeth upon the high land, doe stand in the middest betweene the other two, saile then right with the Flatholme, and very close alongst to the southwardes of it, and being passed it, goe then forth westsouthwest unto the Iland Londey.

About three leagues to the northwardes of Flatholme lieth the towne Cardieff in Wales, being a tyde-haven, before it is a good road, as well for shippes that are bound to the westwardes as to the eastwardes, where men may ly landlockt almost for all windes, to the eastwardes and to the northwardes of it ly many sands and banckes, which fall dry at lowe water, and so that they make men landlockt for northeast and east winds. Hee that is bound into the road before Cardieff comming from the west, must runne in betwixt Flatholme and the point of Cardieff, lying somewhat to the southwardes of Cardieff, and being come about the point, then to the northwardes up alongst by the shoare unto the road.

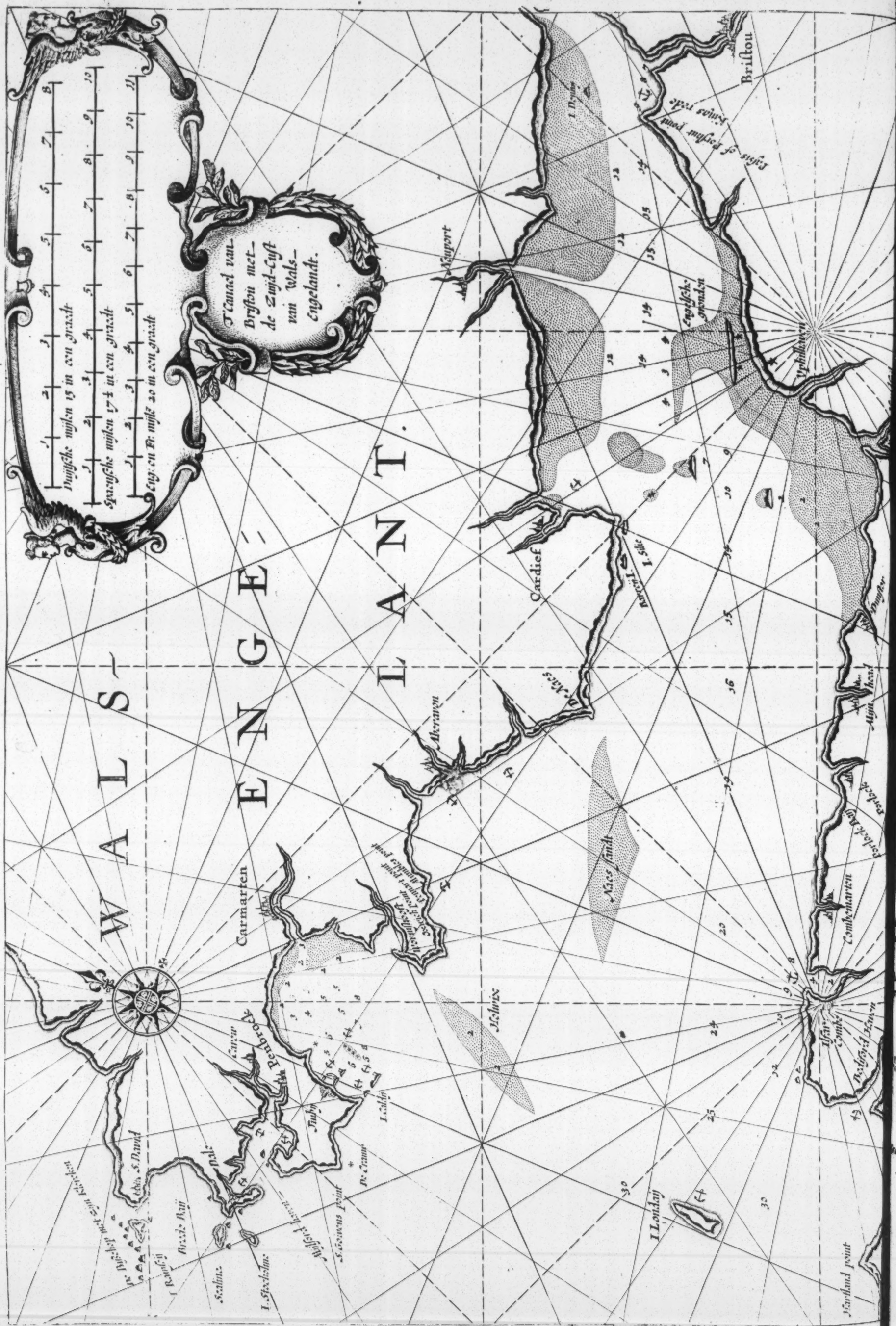
Close unto the point of Cardieff, to wit, to the westwardes of it, ly two litle Ilands, the one next to the point is called Sily, and the westermost Barrey: betwixt Sily and Flatholme lieth a rock, southeast and southeast and by east from the point, which must bee avoided when you will saile through there unto the road of Cardieff. When it is high water you may saile over all that which at half ebbe commeth not above water.

About five leagues west from the point of Cardieff lieth the Naes, to the westwardes of it the land falleth away first about northwest, then afterwards southwest, or southwest and by west, and so maketh a great bay betwixt the Naes & Wormes-head, where there are very good roads for west, north, northeast, and east winds.

From the Naes a little from the shoare lieth a great bank called Naessand, which lieth off from thence west and by south, and westsouthwest at least five leagues into sea. From Wormeshead likewise lieth off a banck which is very steepe, called Helwix, about foure leagues southsouthwest, and southwest and by south into sea, they that come from the eastwardes and will goe to ride in the bay betwixt the Naes and Wormeshead, must runne alongst close by the point of the Naes, through betwixt the Naes and Naessand, likewise they that come from the westwardes, and are bound in there, may runne through close alongst by the point of Wormeshead and the Helwix, it is betwixt them both about an English mile broad. He that commeth out of the sea, may come in betweene the foresaid sandes or banckes, it is there wide and broad.

Wormeshead is a point lying farre out, to look to a farre off almost like the Oldhead in Ireland, but it is above rounder, and goeth sloping downe towards the north, it hath many white chalky spots, whereby it is very good to be knowe.

About foure leagues to the westwardes of Wormeshead lieth the litle Iland Caldy, whereupon standeth a white Tower,



Tower, shewing off at sea like a white saile, which is set there for to know the land by.

Betwixt this Iland and the point of Wormeshead, the land falleth away with a great bay to the northwardes, unto Carmarthen and Tinbuy, in this bay it is all over good anker ground for to ride. On every side of the Iland Caldý men may also anker, and have shelter for all windes. A little to the northwardes of Caldý lieth a rane of suncken rockes, called the Wullox. Hee that will saile about to the eastwardes of the Iland, to Tinbuy, may runne close about by it up to the westwards, through betwixt the Iland and the suncken rockes, leaving them on the starboard side, or else he may runne alongst also to the eastwardes and to the northwardes of the suncken rockes, leaving them on the larboard side, and so then also to Tinbuy, and anker there before the towne in five or sixe fathome. To the eastwardes & to the northwardes of the foresaid rockes, it is also good anker in fixe, seven, or eight fathome, it is there all cleane ground, and farre off shewd water. Men may also saile through to the westwardes of the Iland Caldý, (which is betweene the Iland and the point of the maine land) to Tinbuy, but it is there narrow, yet cleane, & deep enough.

The river of Carmarthen lieth from the Iland Caldý northeast and by north distant about foure leagues, the channell for to saile in there, lieth in eastnortheast on the east or the south side lieth a great banck, which lieth off farre from the shoare, and on the off-side goeth off flat. For to saile in there men may sound it in alongst by the east or north shoare, untill they be over the shouldest of the barre, there is upon it at halfe flood about fourteene foot water, and being over the barre, it will be againe foure fathome deepe, or thereabouts, then they may runne in forth alongst by the south shoare, by the lead, untill they come within the river.

Four or five leagues to the westwardes of the Iland Caldý, lieth S. Gawens point, the south point of Wales, by some called the White point. About halfe an English mile southsouthwest from this point, lieth a suncken rock called the Crow, whereof men must take heed.

Two leagues to the westwardes of S. Gawens point lieth the haven of Milford, a broad and wide sound, lying in at the entry northeast in, being come in within the points, men may goe up to the northwardes, eastwardes, and southwardes, unto divers places and roades. About by the north point, men may saile unto Daleroade, there it is good lying in three fathome and three fathome and a halfe at low water. When men come a little within the south point in the open of Milford haven, there lieth a little Iland or rock like the Mewstone by Plymmouth, being past that, a little, they may runne to the southwardes, into a bay, where they may ly land-lockt for all windes.

A little to the westwardes of Milford haven ly two little Ilands, the southermost is the smallest, called Steckholm, & the northermost Scaline. About two leagues northnorthwest or northwest and by north from thence, lieth the Iland Ramsey, there betwixt them hath the land a great Bay, called the Broad-bay. Ramsey lieth at the north point, and Scaline, at the south point of the Bay, therein alongst the shoare is good riding for north, northeast, east, and south-east winds in seven, eight, & nine fathome. Vpon the north point of this bay, lieth a little towne called S. Davids; to the northwardes of it lieth the coast of Wales alongst northeast unto Cardigan.

About two leagues west and by south to seawards from the Iland Scaline, and three leagues southwardes from Ramsey, lieth that little Iland Grasholm, which is a round cleane

rock, and about four leagues off from it, ly also two little Ilands which are fowle, called the Smalles. The lying of Smalles, them, with the dangers thereof, read in the first chapter of the third book, in the description of Ireland.

On the northwest side of the Iland Ramsey lieth the Bishop with his Clarks, these are rocks that ly of to the northwardes and southwestwardes of that Iland a good way to sea. About five leagues northwest or somewhat northerly from Ramsey, lieth another great rock called Mascus, which is all round about fowle, with many suncken rocks. He that commeth to saile thereabouts, or to ly by, must take very good heed of them.

The Iland Ramsey, or the north point of Wales, and the southeast point of Ireland, ly about eastfourtheast and west-northwest distant sixteene leagues.

Of the depths about these foresaid coasts.

IN the channell betwixt the Holmes & Bristow, it is deep twelve, thirteen, and fourteen fathome, and men may see the land on both sides.

Vpon the coast of Wales about Milford, and to the northwardes of it, men may see the land in 42 and 45 fathome.

Of the Tydes and course of the Streames.

AT the Iland Londey, and at the Holmes, an east and west moone maketh high water.

At Bristow within, a west and by north moone maketh full sea.

At Milford haven an east and by north, and west and by south moone maketh high water.

In the channell of Bristow betwixt Londey and the Holmes the flood falleth e. n. e. and the ebbe w. f. w.

Within the Holms towards Bristow the flood falleth n. e. and by east, and the ebbe southwest and by west.

Betwixt Londey and Milford, the streame falleth northeast, and northeast and by east.

Courses and distances.

From the west end of Londey, to Biddeford eastsouth-east	5 leagues.
From Biddeford to Ilfercombe eastnortheast	4 leagues.
From Londey to the Holmes eastnortheast	20 leagues.
From the Steepholme to the river of Bristow northeast and by east	12 leagues.
From the Steepholme to the Naes westnorthwest about	7 leagues.
From the Naes to S. Gawens point west somewhat northerly	17 leagues.
From S. Gawens point to Milford haven northwest and by north	4 leagues.
From the Iland Scaly to Ramsey northnorthwest	2 leagues.
From Londey to Milford north and by west & northnorthwest	12 or 13 leagues.
From Milford to the Cape of Cornwall southsouthwest	32 leagues.
From Milford to Silly southsouthwest, and southwest and by south	40 leagues.

Heights of these lands.

The Holmes ly in	51 degr. 40 min.
Milford in	51 degr. 50 min.
The Iland Ramsey in	52 degrees.

How these lands doe shew themselves at sea.



Thus sheweth the coast of England betwixt Ilfercoomb and the Holmes, when you saile alongst by it.

The Channell of Brisflow, with the Coast of Wales.

The entrance of Ilfercombe.



Thus sheweth Ilfercombe, when you are right before the entry of it, close by the land.



Thus sheweth the land of Wales from Cardief to Wormeshead.



Thus sheweth the coast of Wales betwixt the Iland Caldý and Milford haven, when the northermost is northnortheast, and the southermost is eastsoutheast from you, and that you may but even see it from the poope.



The land betwixt Tinbuy and Milford sheweth it selfe thus, when you saile alongst by the land, as is portrayed in these two figures at the A A belongeth one to the other: the spire of the tower of Tinbuy is very white.

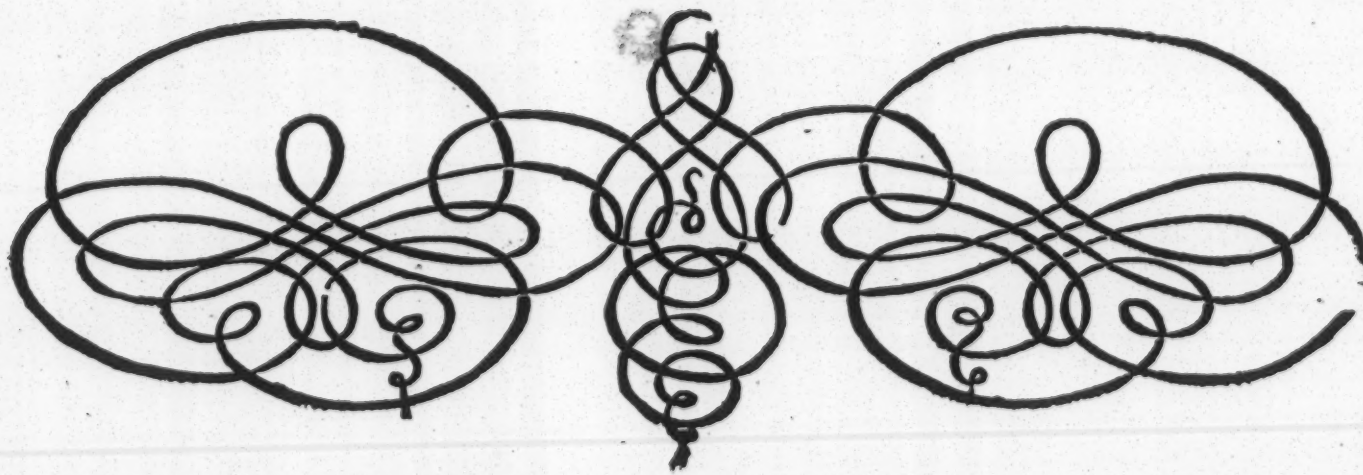


The land from Milford point unto the point of S. Davids head, sheweth as is portrayed in these two figures.



From Milford to Tinbuy, men saile alongst by the coast, about foure or five points, it is most plaine land, like sandhills. About two leagues to the westwardes of the point of Tinbuy, standeth a spirie tower, with two other small flat little towers more, whereby the coast thereabouts is good to be knowne.

The end of the second Booke.



The third part

T H I R D B O O K E

of the

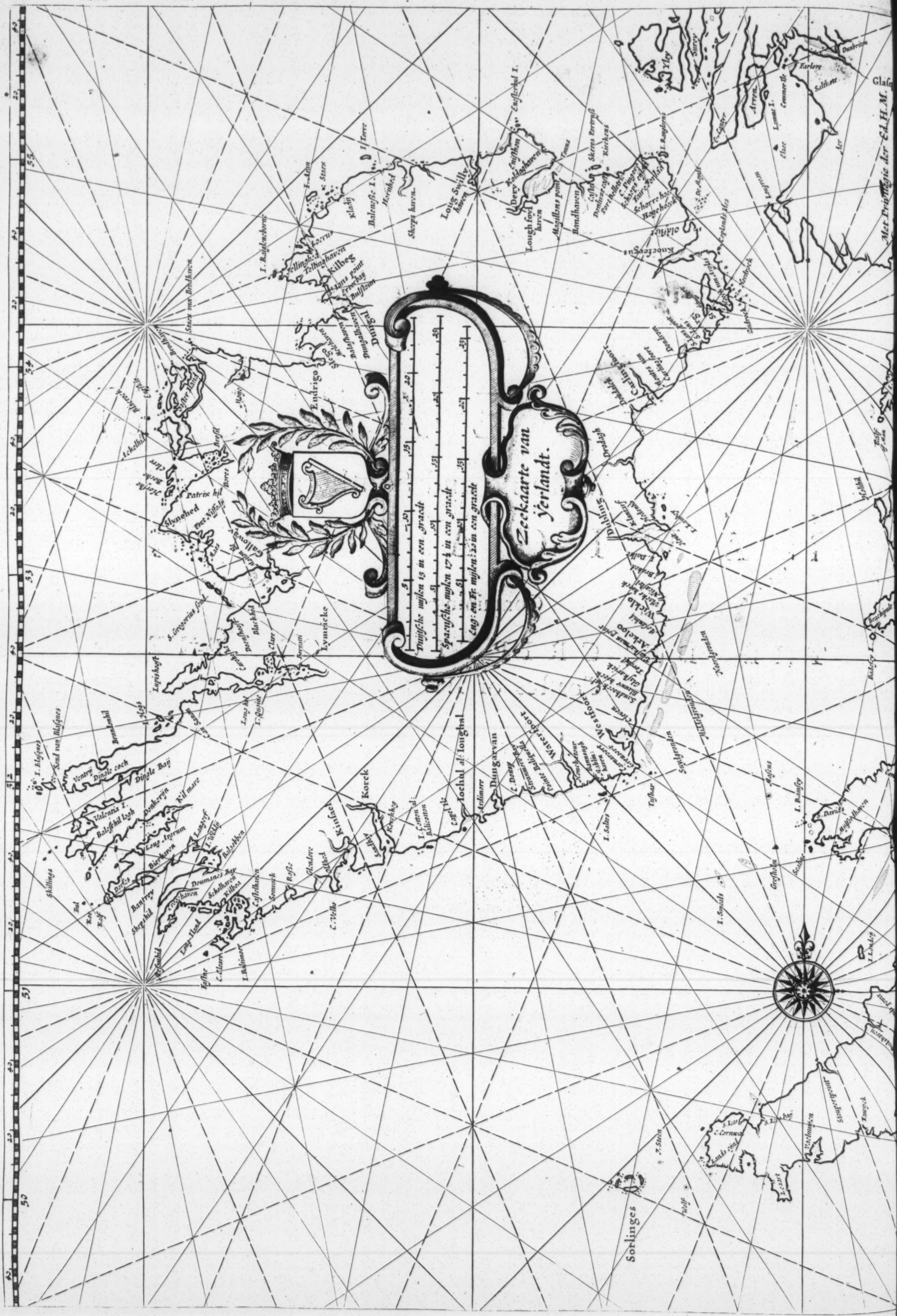
S E A - B E A C O N

of the Westerne and Southerne

N A V I G A T I O N,

Containing

T H E D E S C R I P T I O N O F T H E
Coastes of Ireland.



**Zeekaart van
yerlandt.**

Mijlsche mijlen 15 in een graet
Spaansche mijlen 17 1/2 in een graet
Eng: en Fr: mijlen 20 in een graet



THE THIRD BOOKE

of the

WESTERN
NAVIGATION,

Conteyning the Description of the Coasts of Ireland.

CHAP. I.

The southeast point of Irel. na b. vixt Waterfoord and the point of Glaskarrick.

From the Landse England to Waterfoord, the course northnorthwest; with that course you shall fall right with Waterfoord. But from Silly to Waterfoord the course is north and by west somewhat northerly forty leagues: betwixt both it is all oasie and soft ground.

Nine or ten leagues in the offing from Ireland, lieth a sand banck of forty fathome deepe, where commonly fishermen ly to fish, that is a certaine mark of the distance of the land, when you finde it, in cleare weather, and when there is good sight, then you may see the high mountaine of Dongarvan.

Betwixt Iochull and Dongarvan within in the land, lieth that said high mountaine farre above all the other land, shewing it selfe with three toppes, being called Cape de Quin, or Kary Quin. Sailing alongst the south coast of Ireland you may see it farre off at sea, and lieth northwest from the haven of Waterfoord, therefore comming out of the sea, & that mountaine being northwest from you, and sailing right with it, you shall without faile fall right with Waterfoord.

The haven of Waterfoord lieth about five leagues to the westwardes of the southeast point of Ireland, being called Carnaroort, the coast betwixt both lieth eastnortheast and westsouthwest, and sheweth it selfe in the offing, within the land, with high hilles two and three double one above the other, but by the sea side it is all lowe land, where you may see many flat towers upon it, as you saile alongst by it. The east point of the haven is a low rocky point, but it is cleane, upon it standeth a high white flat Tower, called the Tower of Waterfoord, which you may see farre off at sea, and is a perfect marck to know this haven by; there stand divers more flatte towers to the westwards alongst the coast, but this is better to be seen then all the rest, because it is white and higher then the other. The west point is a high and fowle point, there lieth a showld southsoutheast off into sea, from it the channell is broad and cleane, without it, is eleven and ten fathome deepe, and in the havens mouth seven fathome, and somewhat further in fixe fathome, it lieth in north and north and by west, within this river, within the east point is a good road in foure or five fathome, a league within the rivers mouth there lieth on the west side a steepe point, from thence beginneth a showld lying to the northwards alongst the shoare unto the steepe point of Passage, & shooreth over from that point with a taile, towards the east shoare. Passage is a village wher men pass over, lying on the west side of the river, a little to the northwards of the foresaid steepe point.

Betwixt that village, and that point on the west side is a good road very fit as well for them that are bound out, as for them that are bound up. In sailing up you must take heed of a little showld, that lieth off by a castle (standing on the east side of the river) somewhat thwart over the river downwardes, at high water there is no more then two foot water upon it, a man that looketh for it, may see it, it is also flat, that a man may found it.

About halfe a league northwardes up the river from Passage, there goeth another river westwardes up to Waterfoord.

About halfe waies betwixt the haven of Waterfoord and the point Carnaroort, ly two little Ilands about halfe a league from the shoare, called the Saltes, the southermost is the greatest, & lieth distant from the tower of Waterfoord, directly east almost three leagues. Betwixt these two Ilands you may saile through in five, fixe and seven fathome, but you must keepe neereft the smallest or northermost Iland, for to avoid some suncken rockes that ly at the north end of the great Iland, and at low water are dry.

From the northermost or smallest Iland of the Saltes towards the maine land, lieth a ledge of rockes where men where wont to goe over on foot, but now may saile over. For to saile betwixt the Saltes and the maine land, you must leave two thirds of the distance of water from the Ilands, & one third part from the maine, and you shall have at low water about two fathome deepe.

About a halfe league without the southermost Iland of the Saltes, lieth a rock above water called Kinbeg, & south west about so farre from it, and south and by west from the south end of the Saltes lieth a suncken rock called Kinmor, of the bignesse of a ship, it commeth with halfe ebbe even above water, it is so steep that a man may ly with a shippes side against it, and have fourteene fathome water, so that a man (without any danger) may saile alongst by it, as neere as he will. A man may also (if need require) saile through betwixt Kinbeg and the greatest Iland of the Saltes, but a seaboard of all is best and securest.

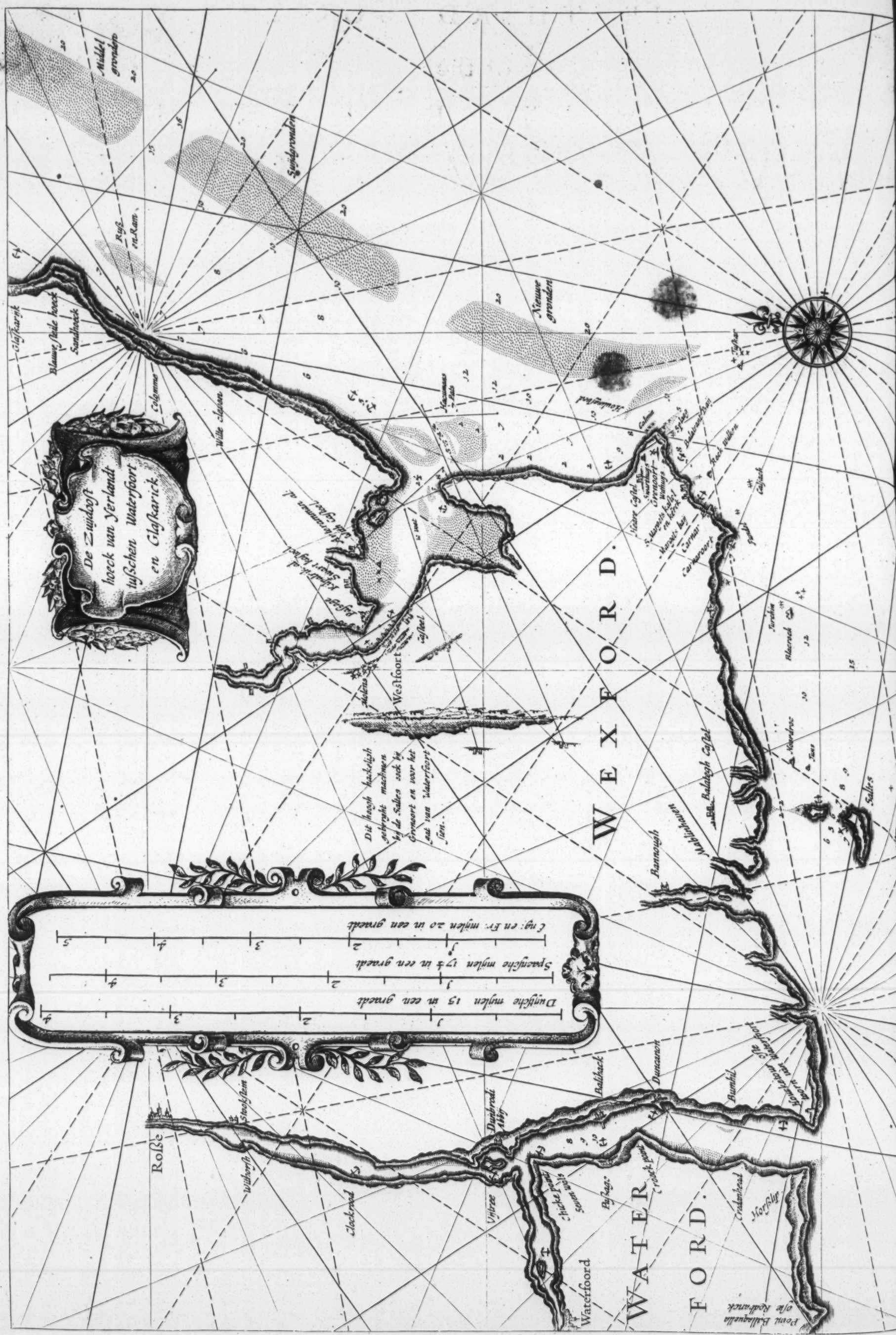
To the eastwards of the rock Kinbeg, southeast from the greatest Iland of the Saltes, ly also some suncken rockes called the Frailes, which may be seen at low water, there men may also saile through within them. Northeast from the Saltes ly also two rockes, the southermost is called the Tuns, and the northermost the north rocke.

Northnortheast from the greatest Iland of the Saltes, or from Kinbeg, and southwest and by south from Carnaroort, lieth one rock above water, called Blackbrock, that is cleane & cleare round about, so that a man may saile round about it freely, without feare of danger. But a quarter of a league eastwardes from it, lieth a suncken rock called the Barrell, of that a man must take heed.

Vnder the Ilands of both the Saltes, a man may ride, under the greatest at the northwest side neereft the north end: the marke or knowledge of the road is, a black rock like a boat turned upside downe, right against that you must anker in seven, eight, or nine fathome, there it is good sand-ground, and landlockt for an eastsoutheast southeast and a south wind, a southwest wind bloweth alongst the shoare. If you anker neerer the shoare in five fathom or thereabouts, there it is rough ground.

Vnder the smallest Iland a man may ride at the east side in seven or eight fathome, so that the north point of the Iland ly northnorthwest from you, there you shall ly neere the land land-lockt for southwest, west, and northwest windes.

From the point of Waterfoord the shoare lieth to the eastwardes, within the Saltes, eastnortheast untill Carnaroort, with many bayes, & all oasie and black sandy ground.



De Zuidoost
hoek van Yerland
tusschen Waterfoort
en Glasgarick

Dutchische mijlen 15 in een graadt
Spanische mijlen 17 1/2 in een graadt
Eng: en Fr: mijlen 20 in een graadt

WEXFORD.

WATER

FORD.

A man being acquainted there, shoud for need, at many places finde good roads, there is nothing that can hurt you except a little fowle place a little to the westward of Carnaroort close by the shoare.

He that commeth out of Waterfoord, & will goe about to the southwards of the Saltes, must not goe more easterly then eastsoutheast, for to go cleare of the fowle grounds, which ly to the southwardes of the Saltes, and when the Saltes shall be north of him, then lieth the course from thence to the Tuskar, directly northeast, or a little more easterly. But for to go alongst without the Tuskar, a man must goe at least northeast and by east to goe cleare of him.

The Tuskar is a great black smooth rock, lying like unto a ship turned up-side downe, but is about twice so great; at the north side of it ly also two small rockes under water. The Tuskar lieth from the point of Grenoort southeast and by east, and eastsoutheast distant one league: from the Saltes eastnortheast foure leagues and a halfe, from Black-rock also eastnortheast two leagues and a halfe, and from the Lands end of England north and by west.

Southeast and by south about ten leagues from the Tuskar, ly two little Ilands close one by another, about foure leagues from Grasholme, called the Smaels, at high water and spring tydes the water floweth over them, the northermost is called Scakum, & the southermost is called Camey, there ly off in the sea two little showlds from them, the one northnorthwest and the other southsoutheast. Betwixt the Smaels and Grasholme lieth also a ledge of rockes, which at low water may bee seene above water. It is not without great danger to goe through betwixt them both, especially with calmes, by reason of the tyde that runneth very strong there through; an eastsoutheast moone maketh high water without the Smaels.

From the Tuskar east and by south about eight leagues, lieth also a great rock, with many small rockes round about it, called Mascus. Hee that commeth from England and will faile towards Ireland, must take great heed thereof, especially when as through westerly or northerly windes hee shall bee driven a little to the eastwards of the course.

For to ancker under the point of Carnaroort, comming from the west, you must take heed to come no neerer the shoare then in fixe fathome, untill that you shall be passed by the high hill that lieth to the westwardes of the point, when you shall have brought out the mill to the eastwards the length of a capstone barre, then you may ancker in nine fathome, there is very good riding.

From Carnaroort to S. Margets bay, the shoare lieth alongst northeast one league, it is betwixt both rocky and fowle, but the fowle ground lieth not farre off at sea. For to keepe cleare without it, you must keepe so farre off the shoare, that you may see the toppes of the double land within above the cliffe land, and you need not feare, but if you come so neere the shoare that the double land within, be covered of the foremost cliffe land, or that thereby it get out of your sight, you shall then surely faile upon the foresaid rockes.

By S. Margets bay upon the foresaid land, standeth a Gentlemans house in the hills, when you have brought that with the mill that standeth within, one in the other, then you may goe into the road, and leave the rockes which ly above water halfe waies over the bay, either on starboard or larboard of you; ancker there in five or fixe fathome sandy ground.

About southsoutheast from S. Margets bay off at sea, lieth a suncken rock, that at low water lieth dry, called Caljach, for to avoid it, take heed unto these marks: when you come from Carnaroort, and have Black rock with the great Iland of Saltes one in the other, and keepe them so, and then faile on northeast, you shall goe right upon this suncken rock. For to goe to the southwards of it, then keepe Black rock with the smallest Iland of the Saltes one in the other, or els for to goe to the northwardes of it; keepe Black rock without or to the eastwardes of the great Iland, & then you shall not need to feare any danger of this suncken rock.

From S. Margets bay to the point of Grenoort lieth the coast northeast halfe a league.

The point of Grenoort is not very high, but steepe and flat on the toppe, off from it goeth a showld about a quarter of a league into sea east and by south, of very rockes and stones, the which at low water falleth dry a good waies off the shoare. The ships (comming from the southwardes) that are bound for Dublin or Washford, goe in commonly betwixt the Tuskar and the foresaid rockes of Grenoort, for to come within the bancks or sands. Oftentimes they goe into Waterfoord for to hire a Pilot to bring them up. For him that will be his owne Pilot, we will describe all the markes that are to be taken heed of, as well for to faile into Grenoort, as also into the deepe or haven of Washford, as they are now at this time, and hereby doe advise men that they doe not alwaies continue so, because by reason of the floods, the channell doth shift, and stretch it selfe out more northerly, and also waxeth deeper.

Commig out of the sea about a league or two neere unto Grenoort, you shall see the high ragged double land high above the point of Grenoort, which (as is afore said) is not very high, but flat on the top. By that said high ragged double land within, men do know the entrance of the channell of Washford, when men doe come from the southwardes and the eastwards. When you have sight of the point of Grenoort, you may boldly goe right with it, untill that said double land, doe shew it selfe, by estimation, but a mans length above the point of Grenoort, as sheweth this figure,



Then are you farre enough from the shoare, not to be in any danger of the showld of Grenoort: Or els you may fit your selfe that you come no neerer the shoare then in fixe or seven fathome: but yet for need a man may borrow of the showld in five fathome, or foure fathome and a halfe, but you must also take heed that you goe not so farre off from it, that you have more then eight or nine fathome depth, otherwise you shoud come too neere the banck that lieth to the northwardes of the Tuskar, which on the inner side is very steepe and needle too, upon it is no more then twelve foot water, and close by it ten fathome deep. If that you keepe the foresaid ragged high land (as is before said) a mans length above the land of Grenoort, and so faile to the northwards, so long untill you bring that same high land without or to the northwards of the steepe point of Grenoort, then are you yet right against the showld, and must yet faile to the northwardes, keeping the mill that standeth next unto the point of Grenoort, so that you may see the top of it even right over the steepe point of Grenoort. When you keepe it so, you shall not be in any danger of the showld or riffe. Then as sone as you see a castle (which standeth a little within the strand) come without the point of Grenoort, then may you boldly faile towards it, by your lead, into the bay of Grenoort.

The said mill stands upon the land of Grenoort, a little within the land, that can serve for a marck for not to come too neere as well to the shoare as also to the showld or riffe, for if you come not so neere the shoare that you leese the mill out of your sight, but keepe so farre off, that you keepe sight of it, then do you keep farre enough from the shoare, and from that rocky showld or riffe. Then when the mill shall come to be southwest and southwest & by south from you, then you are even passed the showld or riffe, go then northwest and by west and northwest according as the wind and tyde shall be into the Bay of Grenoort.

Or els you may observe another marke, faile on so long north, untill that you see a long black house come out to the westwardes of Grenoort, upon the low land, the which sheweth like a black rock upon the low land: then you may looffe on towards the shoare in foure or five fathome alongst by the riffe, and runne in so untill that you get fixe or seven

Grenoort
Riffe of
Grenoort.

Green-bay.

seven fathome, and presently afterwards shall be eight or nine fathome deepe, but then afterwards it shewld by little and little, as you come neere the shoare.

If you have a large wind, then saile so long to the northwards untill you see another little black house come out without the point, saile then unto it, you shall (so doing) have no danger of the riffe.

In the Bay it is shewld water, you may ly there so neere the shoare as you please, in fixe, five, foure, and also three fathome, and there you can get a pilot to bring you to Washford.

*For to saile
out of
Gren-bay.*

For to saile out of the bay of Grenore, you may runne out so close by the shoare, that you may see but the wings of the mill over the Foreland, and so goe on eastsoutheast into sea alongft by the riffe, or according as the wind and tyde shall be, so long untill that you may see the rooffe of the mill, then you may goe larger, and by little and little goe more southerly, and then you shall see it ripple upon the riffe.

*For to saile
to Wash-
ford.*

For to saile out of the bay of Grenore towards Washford with a ship that draweth little water, you may boldly runne alongft by the shoare, and saile through betwixt the Haenmans path and the Soudre, that is a channell where at high water and ordinary tydes is eight foot water, but with a spring tyde there is ten foot water.

The Haenmans paths is a dry sand, which maketh the south side of the channell of Washford, lying off from the Soudre. The Soudre that is the south point of the maine land of Washford haven.

*Shewld of
Washford.*

But if your ship goe deeper, then you must (sailing out of Grenebay) goe further off from the shoare; for to come without the sand that shooteth off from Haenmans paths, yet you must also take heed not to go to farre there-off, for if you come so far off in ten fathom, you shall come to neere unto the banck that lieth without, which is on the inner side very steepe and needle to, therefore go no further off the shoare then in seven, eight, or nine fathome, but comming somewhat more northerly about Haenmans paths, then you may well go off into ten and eleven fathome, also you may not come neerer Haenmans paths then in seven fathome.

If you desire to be upon the Barre of Washford and to leave the showld off Haenmans paths, to wit, to go to the northwards, then take heed unto these marks: At the north side of the channell of Washford lieth a high hill with a round hommock, which is to be seen over the Foreland, & a little castle in the low land, a little above the strand, against the land to looke on; bring that round hommock a little to the northwards of the castle, and saile so in, but bring not the hommock within or to the southwardes of the castle, for then you shewld bee in danger of the sand of Haenmans paths, unlesse it were by need, and with a bare wind, then you might borrow so neere to bring them one in another, and so to saile in, but it is best to keepe them somewhat out one of another, to wit, the little castle to the southwardes of the hommock. If it shewld happen that you could not see these foresaid markes well, nor discerne them, then you may goe about the sand of Haenmans paths by your lead in seven fathome without any danger.

For to know then when you are far enough sailed to the westwards, or are past Haenmans path, and are open before the channell, you shall see in the south land a little castle that standeth about foure leagues in the land within the strand, in the side of the high land of Washford, about southwest and by west from you, when that shall be upon that point from you, and that it standeth betwixt the two northermost little sandhills, that are upon the foote strand of the Soudre (which is upon the south shoare) then are you past Haenmans paths; saile in then upon the markes of that little castle, and the little sandhills over the barre of the haven, there it is at high water about sixteen foot deep. As soone as you are past the outhermost flat at the point of Haenmans paths, you shall go somewhat neerer to Haenmans paths, although it be very steepe, that the tyde doth not bring you upon the taile of the north grounds, where the mast standeth, that is a fore mast of a shippe that is there

lost, and lieth there suncken into the saind, by the foremast the north grounds are very steepe and needle too, but without and within very flat going up.

In this channell & upon the Barre an east and west moon maketh highest water: but the flood runneth yet afterwards a halfe tyde strong by the channell to the northwardes: so that when it is highest water in the cannell and upon the Barre, yet runneth the tyde thwart over the channell, therefore a man must keepe him so neere to Haenmans paths, as is said, that is the cause that the taile of Haenmans path is cast up stilmore and more to the northwards, and that the channell now lieth out more to the northwardes then it was wont to doe: and yet hereafter it is like that it will stretch it selfe more to the northwards, so that the foresaid marcks (by likelihood) will not continue certaine alwaies. Even as the flood after the highest water, runneth yet a halfe tyde or three houres strong (in the channell) to the northwardes, so also runneth the ebbe a halfe tyde to the southwardes after the lowest water, but not so strong as the flood.

Being over the showld of the Barre, you shall have three, three and a halfe, and foure fathome, and in the channell betwixt the north grounds & Haenmans paths against the mast five fathome depth, runne in by Haenmans paths, all alongft untill you come to the foot strand, and then edge over to the north shoare, for to avoid the grounds which ly to the westwards above the Soudre, you may borrow of the showld on the north side, by your lead into thirteene or eleven foot, according to the draught of your ship. In the right deep of this edging over, you shall have at high water fiftene foote deepe. The mark of this edging over is a white little castle that standeth on the north side of the haven in the valley of the land; when that commeth over the steepe point of the innermost lland of the two that ly by the north shoare, and seemeth to be about a mans length high, then you may boldly runne in northwest with it, untill that a little chappell within the land, and to the southwardes of Washford (a little or about a cables length to the northwards of that other forenamed little castle on the side of that high ragged land, that hath served for a mark to saile over the Barre) commeth over a black hommock that you may see upon the high land, a little to the southwardes of the castle of Washford, when you shall have brought these marks one in the other, edge then over againe to the south land upon the marks, for then you shall be above the sands of the Soudre; and with that course also shall not be in danger of the taile of the sand that shooteth off from the point of Passage, which is on the north side; but it is there broad and large, that a man may there turne to and againe, it is altogether showld water, of ten, and ten foot and a halfe at the highest water. Sailing up upon these foresaid marks, you shal come about the distance of a shot of a cast peece without the castle of Washford to the south shoare, saile then in alongft by it, and keepe the sounding of the shoare untill you come within the castle, there you may ancker, & shall finde thereabouts foure fathome water; for a man that is there unacquainted, it is best to ancker there, because before the towne ly some suncken rocks; he that will ly before the towne, must (right against the kay, or the head of the market) goe a good waies off the shoare, because of a suncken rock that lieth thereabouts, and go right against the west end of the towne, and ancker there in three fathome, or thereabouts.

To the southwardes of the sands, that ly to the westwards or above the Soudre, goeth a kreeke through, there is more water then in edging over to the northwardes of the sands. The marck for to saile through there is: that you keepe the highest hommock of the high ragged land (behind Washford) right over the castle of Washford, but there can be nothing gotten by it, with sailing through there, in regard you must neverthelesse go over the showld after that you are passed the sands of Soudre, to wit, over the foresaid depth of ten and eleven foot.

For to saile out from Washford, with a ship that goeth deep, you may not lade no deeper then ten foot or ten foot and a halfe for to come over the foresaid showld; you shall then

then faile about to the northwards of the showld that lieth within, or to the westwards of the Soudre, and goe in and ancker betwixt the showld and the Soudre, there you shall be landlockt for all winds except for the southwest wind you have little shelter, you shall therefore bring out your best ancker, in the southwest and the other in the northeast because that the windes that come out of the southwest over the land, doe not put you upon the north grounds. There at the Soudre, you may take in the rest of your lading, it is a league from the towne. If you will ancker before the Barre of Washford for to stay for the tyde, you must ancker a little to the northwards of the Barre, and goe off somewhat untill you have eight fathome, there it is cleane sandy ground.

In the night there are two fires made upon the Soudre for the Fishermen for to come in by night, by the Haenmans paths he that will faile in by them, must keepe the highest fire a little to the southwards of the other for to avoid the north grounds.

Besides the deep alongst by the Haenmans paths, the Fishermen have a little channell that goeth out close by the north shoare, it is there about six foot deepe a high water.

From the Barre of Washford a man may faile east and by south, and west and by north out and in through betwixt the bancks into sea, or out of the sea, that is a large and broad channell.

For to faile from the Barre of Washford within the sands through towards Dublin, you must keepe the sounding of the shoare, and runne alongst by it in six, seven, or eight fathome, you shall so faile alongst about a cables length from the shoare, which is very cleane without any danger, so that any man (having but a little knowledge of the land) may faile there alongst by night, onely you must take heed not to goe further off the shoare then in seven or eight fathom, for not to come fowle of the banckes, which are on the inner side very steepe and needle too.

When you are sailed to the northwardes alongst by the shoare, about two leagues from the Barre, you shall see three white spots or rockes in the sandhill, a little to the northwards thereof standeth a peece of a wall, much like a pillar of a Church: Right against this pillar, a great English mile from the shoare, beginneth a sand called the Rusch & Ramme, lying from thence alongst the shoare to the northwardes, you may faile about it on both sides, but it is best to keepe the shoare, and to run through there within in six or seven fathome, as is said out of feare of the outermost banckes, which are very steepe, and therefore cannot be founded; therefore men doe seldome use to faile there a seaboard of this sand.

Right against this forenamed Rusch and Ram, the shoare maketh a Bay unto the point of Glaskarrick, when you are so farre as this point, then you are past the foresaid sand.

The point of Glaskarrick is a low point, a little to the northwards of it standeth a castle.

When you are without the bancks in the north channell, & desire to come within the bancks; then keepe that castle

(if you can get sight of it) a little to the northwardes of the low point, and runne boldly right in with it, unto the land, without feare of the grounds, there is a good channell through the banckes; you shall not finde lesse depth then fifteen or sixteen fathom, untill you come to the showlding up against the shoare. This channell lieth in northwest.

Of the Tydes and course of the Streames.

AT Waterford an east and by north, & west & by south moone maketh high water.

Without the land in the fareway betwixt Silly & Ireland, a southwest and by west moone maketh high water.

In the channell or entrance of Washford, an east an west moone.

The flood runneth there to the northwardes, after high water a halfe tyde, and the ebbe contrariwise to the southwardes, a halfe tyde after low water, but not so strong as the flood.

How these lands lie one from another, and how they ly from other lands.

From Waterford to the Islands of the Saltes east, but to goe about to the southwardes of them e.s.e. 3 leagues.

From the south end of the Saltes to Black rock northeast and by east 2 leagues.

From Blackrock to Carnaroort northeast 1 league.

But to Grenoort 2 leagues.

From the Saltes to the Tuskar eastnortheast but from without the fowle ground to the southwardes of the Saltes northeast and northeast and by east 5 leagues.

From Blackrock to the Tuskar eastnortheast 2 leagues.

From the Tuskar to Grenoort northwest and by west, and westnorthwest 1 league.

From Grenoort into Greene-bay first northwest and by north, and then westnorthwest 1 league.

From Greene-bay to the barre of Washford, north and north and by west 1 great league.

From the Barre of Washford unto Washford about one league and a halfe.

From Waterford to Grasholm east and by south 21 leagues.

From the Tuskar to the rock Mascus east and by south 8 leagues.

From Tuskar to the rockes Smaels southeast and by south about 10 leagues.

From Tuskar to the lands end of England south and by east 40 leagues.

From Waterford to the lands end of England southsoutheast, but to Silly south and by east somewhat southerly 40 leagues.

Heights.

Waterford, or the Tower of Waterford lieth in 52 degrees or a little more.

How these lands doe shew themselves at sea.

Sleges Caraquin.

The haven of Waterford.

The Tower of Waterford.

Thus sheweth it selfe the land about Waterford, and to the westwardes, with the high land of C. Quin or Cara, Quin, when you come towards the land.

Thus shew the Saltes, when they are three or foure leagues west and by north from you.

Grenoort.

Thus sheweth the land between the Saltes and the point of Grenoort, when Grenoort is about two leagues from you.

Greenoort.



The figure following is to be joyned unto the former, the A A one to the other.



The land to the northwards of Greenoort sheweth thus, when the northermost point where the crosse standeth over, is north and by west about five leagues from you, and Greenoort south west and by west, so farre that a man may but even see it from below, and then a man may see the Tuskar from the top in the south west.

C H A P. I I.

The East Coast of Ireland from Glaskarrick to Dublin.



Glaskarmen.

Or to saile forth from Glaskarrick to Dublin, runne all alongst by the shoare (which is somewhat full of Bayes) and keepe you (as before) in eight, seven, or sixe fathome. Two great leagues to the northwards of Glaskarrick lieth a sand, a great halfe English mile from the shoare, called the Glaskarmen, the ground is very uneven betwixt both. But neverthelesse runne through within that sand, and keepe the sounding of the shoare, but not so farre from it, that you come into tenne fathome, for then you shoulde saile close alongst by the Glaskarmen, which is very steepe, and about two English miles, or a halfe Dutch mile long.

Arkelo-head.

Markes for to avoid the Glaskarmen.

One English mile to the northwardes of Glaskarmen lieth the point of Arkelohead.

Sailing through between the shoare and Glaskarmen, to the northwardes, a man may see two points, to wit, Mizanhead, and to the northwardes of it Wicklohead. If you keepe Wicklohead even within the point of Mizanhead, then you can take no hurt of the Glaskarmen. But if you would saile a seaboard of the Glaskarmen, then keep Wicklohead a good waies without the Mizanhead, and so runne alongst a seaboard of it, and you can take no hurt of it: But if you keepe the point of Wicklohead but even without the Mizanhead, you shal not saile to saile upon the Glaskarmen.

Ledge at Arkelo-head.

At the north point of Arkelohead lieth a little stony ledge very steepe and needle too. A man must take most heed of it (comming from the northwards) and bound to the southwards, and then must come no neerer it then in five fathom, towards the shoare ly some little rockes above water: when you come from the northwards, and those little rockes are westnorthwest from you, then are you passed it, to wit, to the southwardes of that ledge; and then you may againe bofrow of the shoare upon the lead, commonly men doe keepe so farre of the shoare, that they can take no hurt of the foresaid ledge.

Bay of Arkelo.

At the north side of the point of Arkelo is a faire sand-bay, there is good ancker-ground, and all over good riding in eight, seven, or five fathome, in this bay are good store of herrings caught.

For to saile into the channell before Arkelo.

Right against Arkelo runneth also a channell through the banckes into the sea. For to saile in there out of the sea, looke out for a round hill within the land; bring that west-northwest, or west and by north off you, and saile then in there boldly, keeping it so. But if you bring the round hill west of you, and saile so in, you shall saile upon the point of the north grounds, it is in that channell about seven or eight fathome deepe.

About an English mile to the northwardes of the point is the river of Arkelo but very shoulde, at high water there commeth no more then sixe foot water.

The coast of Washford unto Wicklo lieth most north & by east, a little more easterly: but he that will saile without alongst by the banckes, or sandes, must not goe more northerly then northnortheast for to avoid the grounds which ly about Wicklo three leagues off from the land. And to the southwardes the south grounds ly scarce a league from

the shoare, there not long since a Pilot keeping bad reckoning, ran without the sandes alongst north and by east, and sailed thwart of Arkelo behind a taile of sand that lieth off from the north to the southwards, & there lost his ship, Arkelo lay from them (when they sat upon the sand) w. & by f.

About two leagues to the northwardes of Arkelo lieth Mizanhead it is a black head. Betwixt Mizanhead and Arkelo, in the fareway it is eight and nine fathome deepe; it is also between them both alongst the whole coast, good ankering and cleane ground.

From Mizanhead to Wicklohead it is also two leagues, but this reach is shorter then the other to Arkelo.

One English mile to the southwardes of the point of Wicklo, lieth a little rock close by the shoare; called the Wolf, it commeth at halfe tyde above water, the Fishers boats run through within it, but it is not to be downe with ships.

Right to the southwards of Wicklohead somewhat further out then the point, lieth also a rocky sand, called the Horfe-shoore, close unto the point, about south and by east from it, a man shoulde for need (when hee cannot doe better) saile through there within it, but he must be very wel acquainted with it, or els not well to be done; without, it is more certaine and best going of somewhat to the deepe. If you keepe the point of Braehead a little without Wicklohead, then you can take no hurt of it, or if you keepe the high inner land so that you may even see it above the land of Wicklo, and goe not altogether hidden behind it, then you goe there without it in five fathome. The point of Wicklo is steepe and stony with a double topt little hill, within standeth a little chappell: when you can see that through the saddle of the hill, then you are right against it, and have it on your side: the village of Wicklo lieth to the northwards of the point in the Bay, there is a little haven, which at high water hath ten foot water.

In the Bay the ground is so hard chinnell, that the anckers do not hold there, but without the Bay somewhat farre from the shoare, towards the banks, the ground is somewhat better.

Thwart of Wicklo also is a channell through the banckes, for to saile that out or in, keepe the Castle of Wicklo, that you may see it open of the point, thereupon you may boldly saile out or in.

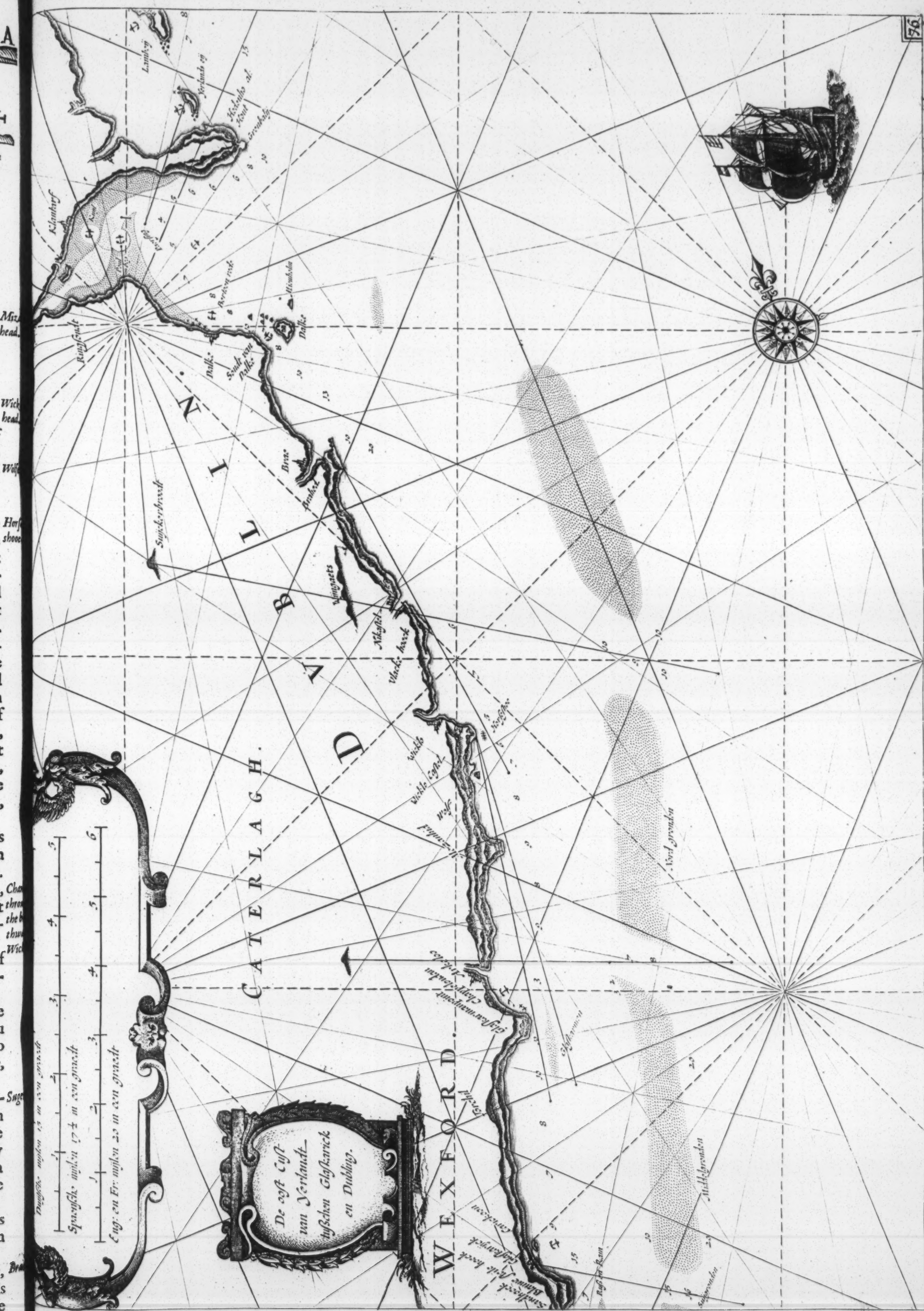
Fourteene English miles from Wicklo lieth the point of Brae, a high steepe stony point, and the highest land thereabout on the sea coast.

Betwixt Wicklo & Brae lieth out a flat point with a little Fisher village called Nicastel, there (sailing alongst) you have 4, 5, and 6 fathom deepe, but from the flat point unto the steepe point of Brae, it is well fourteen fathome deepe, the land lieth there about north and north and by west.

Within the land lieth a high hill of fashion like a suger-loafe, that is the farthest in the land of the three hills which they call the Vineyards, when you have them through one another and are northwest and so keepe them, then may you boldly thereupon runne through the banckes into sea or out of the sea upon these markes may come in within the banckes, that is a very large and broad channell.

Thwart from that foresaid suger-loafe to the southwards of Brae, lieth a bancke that is not deeper then four fathom very stony and sharpe ground.

Braehead is very steepe likewise, also the ground by it, is ten fathome deepe close by the shoare, to the northwards of the



of the point lieth a little tyde-haven, there stand the houses called Brae on the north side.

Iland Dalke.

From Braehead to the Iland Dalke (lying at the south point of the Bay of Dublin) the course is north and by west foure English miles, there betwixt both goeth in a bay.

At the northeast side of the Iland Dalke, ly some rockes, lying alongst the maine not farre from it. Men saile within the Iland through, and leave all the rockes and the Iland lying to seawards.

The Sound of Dalke.

The Sound betwixt the Iland Dalke & the maine land, is called the Sound of Dalke, lieth n.n.w. & n. & by w. through, is 7, 8, & 9 fathom deep, men may ancker under the Iland, neereft the land, there is good sandy ground, or somewhat further in there lieth a round rock, neereft to the maine land, there men may make fast a cable on it, & an ancker thwart over the channell, towards the other rocks, because of the tydes, for the tyde runneth there very strong through. A f.f.e. and a f. and by east wind bloweth there right in, but in regard it is there very narrow, there can go no great sea, with a southeast wind you are landlockt of the Iland, and a south wind commeth off the maine land.

From the Iland of Dalke untill you are passed the village of Dalke, the shoare lieth northwest and by west, before the village you have some succour for a southeast wind, the wind being more easterly, you ly in the open sea. You ly there in 8 or 9 fathome, the neerer the Iland the deeper, the place is called the Berton road; you may not ancker further to the westwardes then before the village: to the westwardes of the village the ground is fowle and sharpe.

Berton road

Houth.

The north point of the Bay of Dubling called Houth or Hedeho, is a very high point, it seemeth a farre off as if it were an Iland, but it is fast to the maine land with a small & very lowe necke: to the northwardes of it ly the Ilands Irelands-eye & Lambey, those may bee seene (being to the southwardes of the point Houth, and being before the entrance of Dubling) over that foresaid small necke of land.

From the Sound of Dalke to the Barre of Dubling the course is n. n. w., in the fareway it is deepe 9, 8, 7, 5, and 4 fathome, the neerer the Barre the showlder water. When you saile up, you must keepe the westermost rock, that lieth without at the Iland of Dalke, a handspikes length open of the Iland, or the other rockes, and shall so come before the entrance, without having any let or hinderance of the sand. Or you may saile more to the eastwardes right towards the lowe land of the norther shoare, and then by your lead alongst by it to the Barre.

If you come from the northwardes, you may run in close about the point of Houth by your lead, & then all alongst by the norther shoare, untill you come to the mouth of the Barre, there alongst it is the deepest water, but towards Dalke it is showlder. From the south shoare runneth off a great tayle of sand, almost unto the north shoare. To the northwardes of it goeth the deepe in. Vpon that taile a little within the point stands a beakon of a mast, made by the English men, called the Paersing.

Paersing.

Marks of the sand.

For not to come too neere this foresaid sand, comming from the southwardes, look out for the Iland Irelands-eye, keep that so, that you may but even see it over the low land close after unto the high land of Houth, so you can take no hurt of that sand. When the tower of S. Patrickes in Dubling, which standeth on the land side of Dubling, commeth right over that beakon the Paersing, then are you yet right aganst the point of the sand which shooteth out a good way to the northwardes of the Paersing. For to goe cleare of that, you must run so far to the northwardes, untill the Paersing commeth right over a little castle with three turrets, or little towers, which standeth to the southwardes of the towne, or when the Paersing commeth betwixt that foresaid little castle, and the towne, then are you above the point of the sand, then go in w. & by f. untill you come over the showld-est of the barre: there is at spring tyde 15 or 18 foot water, but at low water & neepe tyde, not more then six foot, you may found it on both sides. When you are over the showld-est of the barre, then ancker within the sand by the beakon Poelbegh, there it is at high water four fathome deep. The

Road in Poelbegh.

mark of this road is, that you bring that afore written hill like a fuger loafe (that here before is spoken of, and serveth for a mark for to saile by into the channell of Wicklo) over another lower hill, then are you in the best of the road, bring out your best ancker in the southwest, against the blowing of the southwest windes, which sometimes come powring downe there very strong out of the southwest over the high land, & the other in the northeast. At low water the sandes ly dry there round about the road.

Men may also ancker somewhat further in, at the north side of the sound, right against a village called Klantarfe in a poole, where at low water remaineth nine or ten foot water: but round about the shippe (as it is in most places of the haven) it doth fall altogether dry, so that there a ship hath but even roome to wind up to and againe. Men do morre there southsoutheast and northnorthwest. A southeast and northwest moone maketh there the highest water.

If the ships that come there be any thing great, they must stay in Poolbegh, close before the towne it is very showld, and falleth at low water altogether dry: with an ordinary tyde men cannot come before the towne with a ship that draweth five foot water, but with a spring tyde with ships that drawe seven or eight foot water.

At the north side of the river, a little further out then the towne, right over against Ringsend, lieth a little Iland, within it is a fit place to make shippes cleane.

The sandes or banckes that ly alongst this east coast of Ireland from the Tuskar unto Dalke, are on the out side, or on the east side very steepe and needle too, so that men may not come neerer them then in 24 and 25 fathome, in 20 fathome men are close by them, they are not deeper at some places then one fathome, or one fathome and a halfe: but at the north end by Dalke, about two fathome and a halfe, and three fathome deepe, all stony ground, and ly on the off-side alongst northnortheast and southsouthwest, at the north end they ly about eight English miles, but at the south end they ly but two English miles from the land. If you are bound for Dublin, and will goe without these sands, runne then so farre to the northwardes, untill you can see the little Iland (Irelands-eye) without the point of Houth or Hede- hoo, runne then right on to Houth or Hede- hoo, and then you shall take no hurt of the north grounds.

Of the tydes, and course of the streames.

ON the east coasts of Ireland to the southwardes of the bay of Dublin, a southsoutheast and northnorthwest moone maketh high water.

At Dublin a southeast and northwest moone.

The flood runneth from the Tuskar without the banckes alongst betwixt Ireland and England northnortheast, and the ebbe southsouthwest.

How these places doe lie one from the other, and from other lands.

FROM the point of Glaskarrick to the point of Arkelo north and by east 4 great leagues.
From Arkelo to Mizanhead north and by east somewhat easterly 3 leagues.
From Mizanhead to the point of Wicklo north and by east somewhat easterly 2 leagues.
From Wicklohead to the flat point by Nicastle n. 3 leag.
From Nicastle to the point of Brae n. & n. & by w. 1½ leag.
From Wicklohead to Braehead north, & n. & by w. 5 leag.
From Braehead to the Iland of Dalke n. and by w. 2 leag.
From Dalke to the barre of Dublin n. n. w. 2½ leagues.
From the sound of Dalke to the point Houth n.n.e. 2½ leag.
That course runneth without the point Houth, Irelands-eye, Lambey, and Rock a Bill.
The banckes ly from the Tuskar to the north end north-northeast and southsouthwest.
From the Barre of Dubling to Holyhill in the Iland Anglesey east and by south 19 leagues.
From the Barre to the towne Dubling w. f. w. 2 leagues.

How

How these lands doe shew themselves at sea.

Sugerloafe.

Brachead.

Thus sheweth the coast of Ireland when that Sugerloafe is northwest, and the point of Brachead northwest and by north about seven leagues from you. When that Sugerloafe commeth northwest and by west from you, then may you runne so in, over the north grounds through a broad channell of nine and ten fathome.



When the Sugerloafe is thwart from you, it sheweth, with the high land within it thus.

Sugerloafe.

Brachead.

and Dalke.

Thus sheweth the coast of Ireland betwixt Sugerloafe and the Iland Dalke, lying at the south point of the Bay of Dublin, when a man is about Brachead one or two leagues from the land.

South point of Dublin.

Iland Dalke.

The point Houth.

Iland Lambey.

When a man commeth from the southwardes, thus sheweth the Bay of Dublin with the point Houth, and the Iland Lambey to the northwardes of it.

C H A P. I I I.

The East Coast of Ireland from Dublin unto Strangfort haven.



He North point of the Bay of Dublin called Houth, is round about cleane, so that a man may ancker round about it. To the northwardes of it ly the Ilands of Irelands-eye and Lambey. Irelands-eye is the smallest, it lieth betwixt the afore-said point Houth and Lambey; at the west side of it standeth a little Chappell, right against it you may ride. At the south end lieth off a stony riffe which must bee avoided. Right over against that Iland in the maine land lieth a haven for small shippes, at a little towne called Malcheall.

Vnder Lambey you may ride under the north side for a southerly wind, in twelve and thirteen fathome, but for a sea wind, you must shift, unto the west side by a Gentlemans house, and ancker there, but it is not very good lying there, because alwaies there commeth in a great sea.

About five leagues northwest and by north from Lambey, lieth the haven of Drodagh, betwixt them both (neerest Lambey) close by the land ly the rockes called the Skires. About two miles to the northwardes of Lambey lieth a great rock called rock a Bill, you may runne round about it on both the sides.

Drodagh hath a narrow crooked haven, which is not good to come into without a Pilot, or some one that is well acquainted with it.

Four or five leagues to the northwardes thereof lieth the haven of Dondalk, which is very showld, and little used, at low water a man may goe over a foot.

North and by west about thirteen leagues from Lambey, seven leagues to the northwardes of Drodagh, and two leagues from Dondalk, lieth the haven of Carlingford: the north point of that haven is somewhat fowle and rocky, but you may goe in about it by your lead: the south point is very fowle with rockes and suncken rockes, which you must shunne, & runne in by the northerne shoare: Some say that men may runne in through betwixt the rockes and the souther point with small shippes, but it is not without danger. When you are within the suncken rockes, you must runne over to the souther shoare, and in alongst by it, untill you come before the towne of Carlingford, and ancker there in fixe, seven, or eight fathome, so shallow as you will; you may faile in upon the oase, and save a shippe without ancker

or cables. Greene-castle lieth at the northeast side of the Greene-castle, two miles from Carlingford.

About seven leagues northeast, or somewhat easterly from Carlingford, lieth a point called S. Iohns point: betwixt S. Iohns both about halfe waies lieth the Mount of Carlingford, a high mountaine. From S. Iohns point lieth off a ledge of rockes, whereof you must take heed. A great league to the northwardes of S. Iohns point, lieth Arglas, from thence forth to the haven of Strangford it is three small leagues.

From the north point of the haven of Strangford, lieth off a fowle ledge of rockes. A little off from the south point lieth a suncken rock, which at halfe ebbe commeth above water. For to faile into this haven, you must leave this suncken rock on the larboard side, & goe to the northwardes of it, but must take good heed of the foresaid ledge at the north point. A man may also goe in through to the southwardes of the foresaid suncken rock, betwixt it & the point (but to the northwardes of it) is the best & the broadest channell. Somewhat further in lieth also another suncken rock at the northeast side, that must bee left on the starboard side in going in. When that you come then so farre as Audleys Castle, there you may ancker or runne in about the point on the larboard side, and ancker there under it.

About a league and a halfe to the northwardes of Strangford ly the rockes South-rock and North-rock, of them reade in the Chapter following.

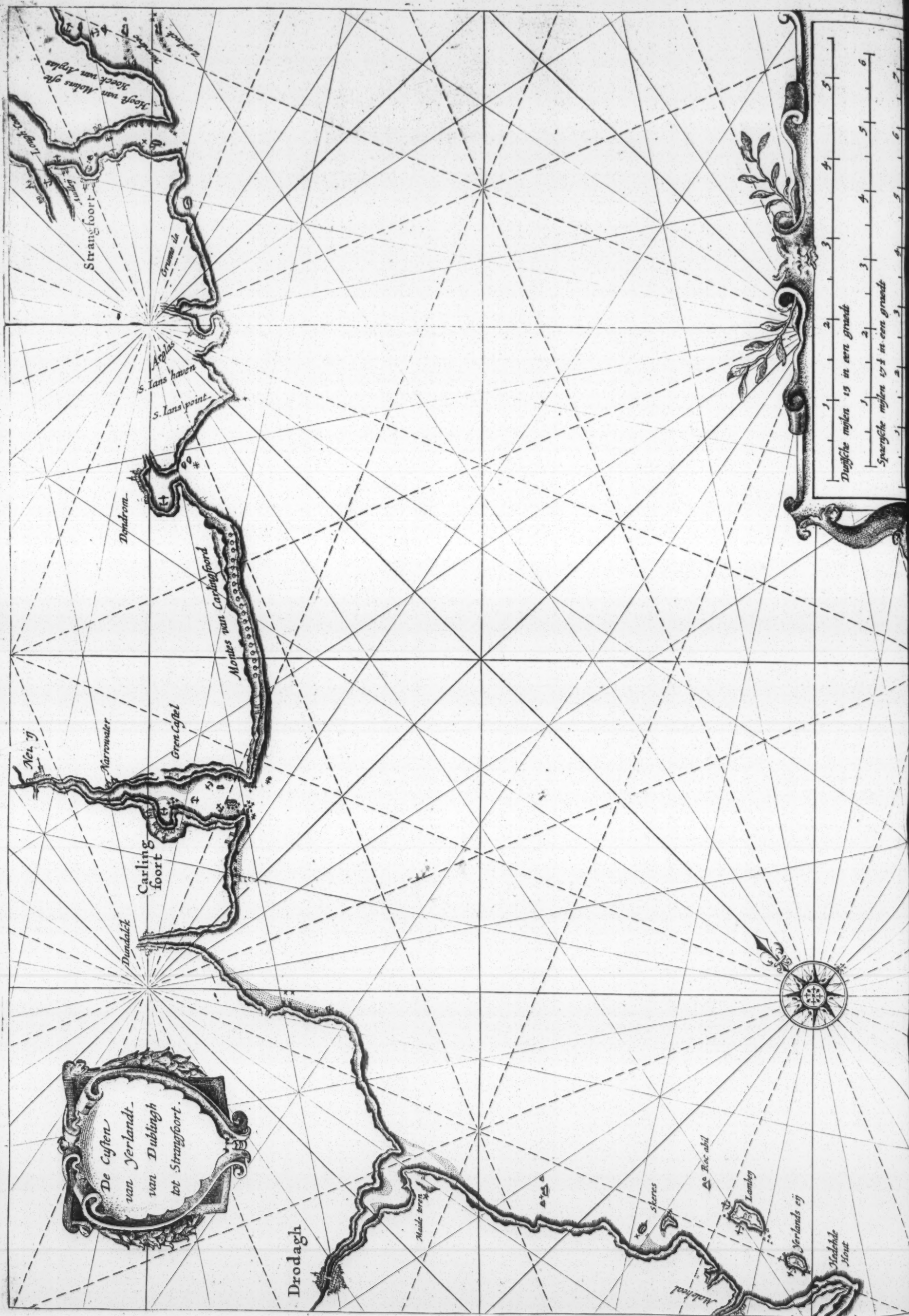
of the tides and course of the streames.

ON these coasts southsoutheast and northnorthwest moone makerh high water.

The flood commeth here from the southwardes, and also from the northwardes, about the north part of Ireland, and meete one another about right against Carlingford, where they stoppe one the other. The ebbe contrariwise falleth (to the northward of Carlingford) to the northwardes, and (to the southwardes of Carlingford) to the southwardes.

Courses and distances.

From Lambey to Drodagh northwest and by north 4 leagues.
From Lambey to Carlingford north & by west 13 leagues.
From Carlingford to S. Iohns point northeast somewhat easterly 7 leagues.
From S. Iohns point to Strangford n.e. and by n. 4 leagues.
From Lambey to the South-rock northnortheast 21 leag.



How these lands doe shew themselves at sea.

The Iland Lambey sheweth it selfe thus when it is from you north-west and by north one league off.

Thus sheweth the land a little to the southwards of Carlingford when this high point is north-west from you about five leagues. He that will goe into Carlingford, must goe in close by the shoare.

The land to the northwardes of Carlingford, sheweth it selfe thus when the northermost point is north and by west from you five or sixe leagues.

C H A P. I V.

The Coastes of Vfler, betwixt Strangford and Banthaven, together with the coastes of Scotland over against it.



From Strangford haven to the northwardes lieth the coast forth north-northeast one league unto a point which some doe call the point of Arglas, others the point or head of Molines; from thence falleth away the coast unto the Bay of Knockfergus north-northwest.

By that foresaid point of Arglas or Cape of Molines, to wit, to the northwardes of it, two little miles, ly two great rockes: the southermost is called the Southrock, it lieth about two miles to the southwardes of the northermost, called the Northrock. From the south end of the Southrock lieth a ledge of rockes at the least two miles off, also one from the northeast point a great ledge of rockes, whereof many at high water are under water. There goeth also from it a fowle ledge off unto the land, so that a man may hardly faile through betwixt the rockes and the maine land, except a man be extraordinary well acquainted. But betwixt the Northrock and the Southrock goeth a faire broad Sound through, where men may well turn to and againe, and at many places may ancker, it is all over good cleane sandy ground, sixe, seven, and eight fathome deepe.

From the east side of the Southrock unto the Ilands at the east point of the Bay of Knockfergus, called Koppen, or Kopland Iles, the course is north-northwest or somewhat more northerly, about six leagues: for when men faile from the east side of these Ilands to the southwardes, with a south-southeast way, they goe farre enough without the North and Southrockes. There betwixt them both ly divers more little Ilands, rockes, and suncken rockes, and showlds, for the which men must take good heed when they will come neere by the shoare.

The Coplandes Iles ly about an English mile from the land, they are on the off-side to sea-wardes, cleane, but from the inner side there goeth off some ledges and fowle ground, in the mid-way, there going through it is five and sixe fathome deepe, but it is best to go without, except for them that are well acquainted. The north point of the bay of Knockfergus, lieth distant from the Copland Iles, three or foure leagues northwest or somewhat northerly, for with a southeast course from the north point towards the foresaid Ilands, that goeth far enough without them.

The Bay of Knockfergus is a great broad Sound; About three leagues inwardes in the Bay, west from Copland Iles, is the road before Knockfergus, there is good ancker ground in three fathome, and three fathome and a halfe. Somewhat more further out towards the north point also on the north side of the Bay, standeth a Castle, called Mouse-hills Castle, by it is a sandy bay, where is good ankering as well for great shippes as small, for the north and the northwest windes, but a southwest winde maketh a bad road in these places.

A little to the northwardes of the north point of the bay of Knockfergus, lieth a little Iland called Kow, from thence

lieth the coast of Ireland forth north-northwest about nine or ten leagues unto the Iland Raghleens. Betwixt them both ly the nine Maydes one great league without the land, and two great leagues to the northwardes of the Bay of Knockfergus: they are great rockes, that ly but little above water, or low rocky little Ilands, and a multitude of rockes under water about them, that ly off so farre to the north-northeast, that men cannot come neere them within five or sixe English miles. There goe some Creekes through the fowle grounds, where men (for need) might faile through, but it is no wisdom to go about it, when there is no need, and that men can doe better. Not very long since, there came a man (by night unacquainted) therein, and runne through onely upon the sight of the breaches of the water, and got through without any hurt, but not without great feare and danger. Hee that commeth off from the Faire Forland, must (at least) go southeast and by east, for to run alongst cleare of these fowle groundes. From the west side also lieth off a little tayle of a ledge of rockes, towards the land. Further, it is there cleane, that men may faile through there within, but men must not come neerer the Maydes, then about halfe channell betwixt them and the mayne, but the mayne land so neere as they will, which is both cleane and cleare, with many Bayes, where men may every where ancker, yet heere and there ly some rockes, but they are all above water: There is nothing that can hurt but men may easily see it.

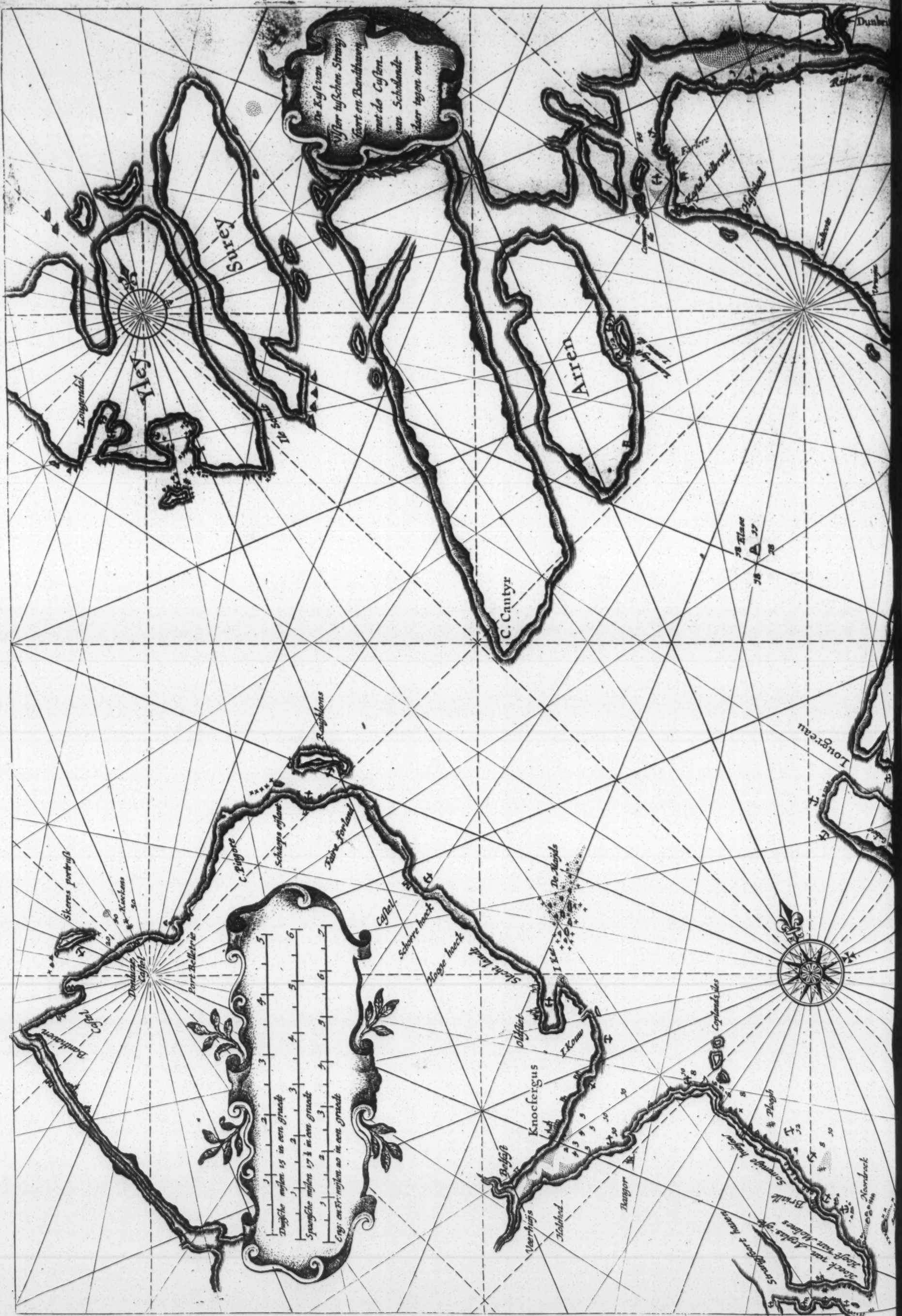
A great league to the northwardes of the north point of the bay of Knockfergus, and an halfe league south-southwest from the Maydes, lieth a haven called Old-fliete. This is a very good haven, where you may ly your ship safe without either ancker or cable. For to know it when men come from the northwardes, they shall see two flat little Towers, the one somewhat higher then the other, like as if men saw a shippe with maine-faile and fore-faile, without toppe or toppe-failes: these stand upon the north side of the Bay.

At the south point lieth a small round little Iland or rock called the Knee, a speciall marke for to know this Bay; Men runne in there amiddes the channell. But when you come from the southwardes, and get sight of the little Iland Knee, then runne in close about it.

From Old-fliete to the northwardes unto faire Forland, the coast is very cleane, that you may faile close alongst by it, boldly without any feare, except you runne farre off from land, without the foresaid Maydes towards the Scottish coast.

Faire Hid, or Faire Forland is the outermost northeast point of the maine land of Ireland, and lieth a little to the southwardes of the Iland Rachleens, so that this point and the east point of Rachleens ly neere about south and north one from the other.

At Rachleens, or Faire Forland the northeast point of Ireland, come Scotland and Ireland neereft one to another. The Rachleens is an Iland that men may faile round about, either to the northwardes, or to the southwardes, as they will: according as it happeneth best convenient with wind and tyde. At the southwest side is a faire bay, where is good lying almost for all windes. When men come from the west, it seemeth to the southwardes of the Rachleens to bee close without any opening, because the easternmost point of Ireland



Ireland Faire Forland, lieth somewhat further out, behind the Rachleens, but when they come neerer betwixt them, sheweth it selfe open by little and little. On both sides are the shoares flat and cleane, so that men may ancker there where you will, either by the coast of the maine land of Ireland, in eight or nine fathome, or in the bay under the Iland in cleane sandy ground. Over against the Rachleens, close by the maine land, lieth another little high Iland, called the Lambs or Sheeps Iland, to the southwards of it, betwixt it and the main, men may not faile there about it, but betwixt it and the Iland Rachleens it is broad enough.

From the Rachleens unto the Skires Portrush, the course is westsouthwest distant seven leagues. About two leagues to the eastwardes of it, in the maine land, lieth Porto Belletrie, a bad road for great shippes, the ground is there fowle and sharpe.

Betwixt Porto Belletrie and Skires Portrush, neereft unto Skires Portrush, ly the Chickens, these are suncken rockes, which may be failed about on both sides, for to come to ancker under Skires Portrush.

The Skires Portrush is a rocky Iland, it hath on the south side a faire bay, where you may ly in fixe and seven fathom, cleane sandy ground landlockt for all winds, except for the eastnortheast wind, which bloweth alongft the shoare, there open in. For to come under this Iland from the east, you must goe close alongft by the shoare of the maine land, for to shunne these foresaid suncken rockes the Chickens. It is there all over cleane and cleare: or els if you were minded to goe without, or to the northwards of the Chickens, for to come under the Iland, you must shunne the East point of the Iland, because of a suncken rock that lieth a little off from the east point of the Iland. At the northwest side of this bay is also a small narrow channell, where you may faile through.

A little to the westwardes of Skires Portrush lieth the Banthaven, there alongft you may faile up unto the new towne Colran, it is a bad channell to come in, as well by reason of the strong freshet that commeth out, as also because it is very shold: with ships that draw eight foot water, you must have at least three quarters of the flood before you can goe in.

The coast of Scotland.

THe haven or sound of Loughgrean or Lookreen in Scotland by the point of Galloway, lieth distant from Faire Forland the northeast point of Ireland, eastsoutheast about thirteene leagues, but the point called Cantir, lieth distant from Lookreen northwest & southeast nine leagues, there betwixt them both goeth up a great broad sound northeast in, called Dunbritain Firth, through which men faile up unto Glaskow in Scotland.

The sound of Lookreen you may faile in, and a good waies you may turne in to and againe for to ancker there within for westerly windes, if you doe come no neerer the shoares on either side then in foure fathome, you can take no hurt: you may ancker somewhat in, by the second high point on the east shoare in ten or twelve fathome.

About seven leagues to the northwards of the point of Galloway in the foresaid great sound, lieth a high sharpe Iland, cleane round about, of fashion almost like unto a pook of Hay, called Ailza, or Elzee, there you may boldly faile round about it, it is there round about it, and close by it, eightene fathome deepe.

From Elzee northwardes fixe leagues, lieth also another little Iland, close by the east side of the great Iland Arren, called Lamlash, or Lam Ile, cleane also round about, there you may faile round about it, and ancker under it for all windes in ten, twelve, or thirteene fathome, to wit, within it, betwixt the Iland and the great Iland of Arren.

North and by east and northnortheast two great leagues from Lammie Ile, lieth an Iland by the point of the maine land called Commer-Ile; on the east side of it betwixt the Iland and the maine land, you may faile through into a faire Bay, where men are landlockt for all winds, & from thence

West. Water. iij. Booke.

may faile forth unto Dunbritaine, or into the river of Glaskow. The foresaid Iland Commer-Ile lieth from the Iland Elzee, about north and by east. For knowledge of this Iland, when men come off from Elzee, or from the southwards towards this Iland, men shall see a great castle on the east side of the maine about a great league to the southwardes of Commer-Ile, and also a little castle, a good waies to the northwards, close upon the water side, that standeth right to the southwardes of the Iland Commer-Ile, or the sound that lieth there in to the eastwardes of it; upon the same Iland standeth also a little castle close to the water side. Runne in betwixt the Iland and the maine land, about n.n.e. in, & leave the Iland a great cables length on the larboard side, & the main land on the starboard side you must shun more, because of a great ledge that lieth off from it towards the Iland, and somewhat more northerly. Having gotten cleare of the end of this ledge, runne then right towards the maine land into the bay, or sound, and ancker there in ten fathome, right against a stone house with an orchard thereby, it shall be then a stearne your ship about seven fathome deepe, and there morre your ship well.

For to faile out of the Sound of Commer-Ile, towards To faile from Com-mer Ile to Glaskow. goe first northwest and by north unto by the point of the Iland, that is, to the westwardes of you, & then north alongft by it, then by little & little more easterly, at length northeast, run so all alongft by the easterland, without leaving of it, you shall not faile to come to the Sound of Glaskow. Comming by the point run close about by it, first eastnortheast, east, and east and by south, at last eastsoutheast, all alongft by the souther shoare, you shall then see a castle somewhat a head upon the souther land, close upon the water side, with two tuffs of trees upon the high land right eastsoutheast from the castle; keep that foresaid castle between the two tusses of trees, and faile in thereupon, so shall you run right alongft the deepest of the Creeke, there is at high water five fathom, and at low water three fathom. From the north shoare lieth off a great shold, which lieth over the Sound more then two third parts from the norther shoare; towards the souther shoare it falleth dry at the lowest water, therefore men must shun the norther shoare, and runne alongft by the souther shoare. There standeth a white castle upon the south shoare, right against that begin the foresaid sands. In the creek it is soft ground, but towards the sand the ground is hard, therefore when you feele by your lead that it is somewhat hard, that is a token that you come too neere the shold, faile then so forth upwards to Dunbritaine, there lieth a little Iland on the south shoare, which is at low water fast to the land, when you shall bee past it about two Cables length, then ancker there in five fathome at high water.

A south and by west moone maketh there the highest water.

Of the tydes, and course of the streames.

ON the coast of Ireland from the Southrock & Northrocke unto the Coplands Iles, a southsoutheast and northnorthwest moone maketh full sea. But to the northwards of it a southeast moone.

On the Ilands of the Raghleens and Skires Portrush an eastsoutheast and westnorthwest moone.

The flood commeth there out of the west, and falleth through betwixt Ireland and Scotland, from the Cape Cantir to the Mull of Galloway, southsoutheast, unto the Iland Man, there the floods out of the south and north doe meet one the other. The ebbe contrariwise falleth alongft the coast northnorthwest betwixt Ireland and Scotland to the westwards unto the Ocean sea.

At Egliftoun in the Sound of Glaskow, a southwest moon maketh full sea.

Courses and distances.

FROM the Northrock and Southrock unto the Coplands Iles northnorthwest 6 leagues. From

K

From the Coplands Iles to the north point of Knockfergus,
northwest somewhat northerly 3 or 4 leagues.
One league to the northwardes lieth the haven of Oldfiet.

From Oldefiet to the Raghleens within the Maydes,
through northnorthwest 6 or 7 leagues.
From the Raghleens to Skires Portrush w.f.w. 6 or 7 leag.

How these lands doe shew themselves at sea.

Thus sheweth the point of Scotland over against the Bay of Knockfergus, called the Mull of Galloway, when men sail alongst by it, a league without the land, and that the northermost and the low point is northeast from you, and the southermost southeast from you. Under the north point it is on both sides good anckering in ten or twelve fathome, for southerly and easterly windes.

The Iland Elzee in the great bay of Dunbrittaine sheweth it selfe thus.

The Iland Lamblash, or Lam Ile on the east side of the Iland Arren sheweth it selfe thus, being 2 leagues off from it.

The Iland Commer Ile lying before the sound of Dunbrittaine, or Glaskow, sheweth it selfe thus.

Thus sheweth Cape Cantyr, when it is from you northwest and by west about seven or eight leagues,

C H A P. V.

The Coastes of Vlyster, from Banthaven unto the Cape of Tellingh.

Loughfoile
Touns.



Two leagues westnorthwest from Banthaven, or west and by north from Skires Portrush, lieth the haven of Loughfoile, before it lieth a great plate of sand called the Touns, which lieth from the west point of the haven, a great waies to the northwardes off from the shoare, when the winde is out of the sea, it breaketh very much upon it, with small ships that draw little water, men may faile into Loughfoile haven at high water to the southwardes of the Touns, betwixt the Touns & the souther point, called Magillions point; but it is there very uneven, & at full sea there commeth no more then eight foot water, but alongst to the westwards of the Touns, it is very deepe, men may found about the Touns on the off-side in foure fathome.

For to finde the channell that lieth in to the westwardes of the Touns, (comming from the east, or alongst by the Touns) you must looke out for a little sandy Bay, that lieth on the west side, even within the north point of the river under the high land; bring it so, that you may see it open of the foresaid north point, and faile in thereupon, untill you come by the land, and then runne in alongst by it southwest untill you come right against Greenecastle. If you come from the west, or the north, you may boldly without feare runne alongst the shoare, and about the point upon your lead, without comming neere the Touns, you may see any thing that might doe you hurt, comming by Greenecastle, there may you ancker so, that you may see Withcastle without the point of Greenecastle, there you may ly within the Touns, sheltred for windes out of the sea.

For to faile up from Greenecastle, you must runne up alongst by the west shoare, by your lead, and shunne the little landes that ly here and there alongst that side, untill you come past Withcastle, right against the three trees, there is the ordinarie road.

Betwixt Greenecastle & Withcastle neere unto Greenecastle goeth a Creeke or Slencke through the grounds, unto the easter shoare, which is as deepe or deeper then the right fareway unto Withcastle. When men come off from Greenecastle, they must take good heed not to goe farre off from the wester shoare, lest they fall into that creeke.

How men shall faile from the foresaid road forth up unto the Towne Derrey, they may perceive or mark by the card.

From Loughfoile haven unto the Ilands Enesterhull (by Enesterhull some called Monsterhull) the course is northwest foure or

five leagues, these are small black Ilands or rockes, not very high above water, and ly a little off the northermost point of Ireland, called Eniston, a high plaine land, and very good to know, for him that hath once seen it. Betwixt the Ilands and the point men may faile through, but not without great danger for them that are not very well acquainted with it, because of much fowle ground and showlds that ly betwixt them both. Under the foresaid point Eniston, on the west side men may anker for easterly winds, or els to stoppe the tyde.

From the Ilands Enesterhull unto Lough-Swilly, of some called Lockilly, the course is southwest five leagues, that is a faire haven. For to faile in there, men must shunne the west side, and goe in alongst by the easter shoare: The land about LoughSwilly is the highest land of the whole north coast of Ireland, and thereby it is also very good to know, for those that (comming out of the north) doe fall with the land thereabouts.

Foure or five leagues westsouthwest, or somewhat westerly, lieth a large broad haven, called Sheepes-haven, but it is at some places fowle ground, within it men may ly landlock for all windes. The west point lieth out, called Hornehead, or cape de Horne, upon it is a hill with two hommocks, to see to, like two hornes and thereafter the point is named.

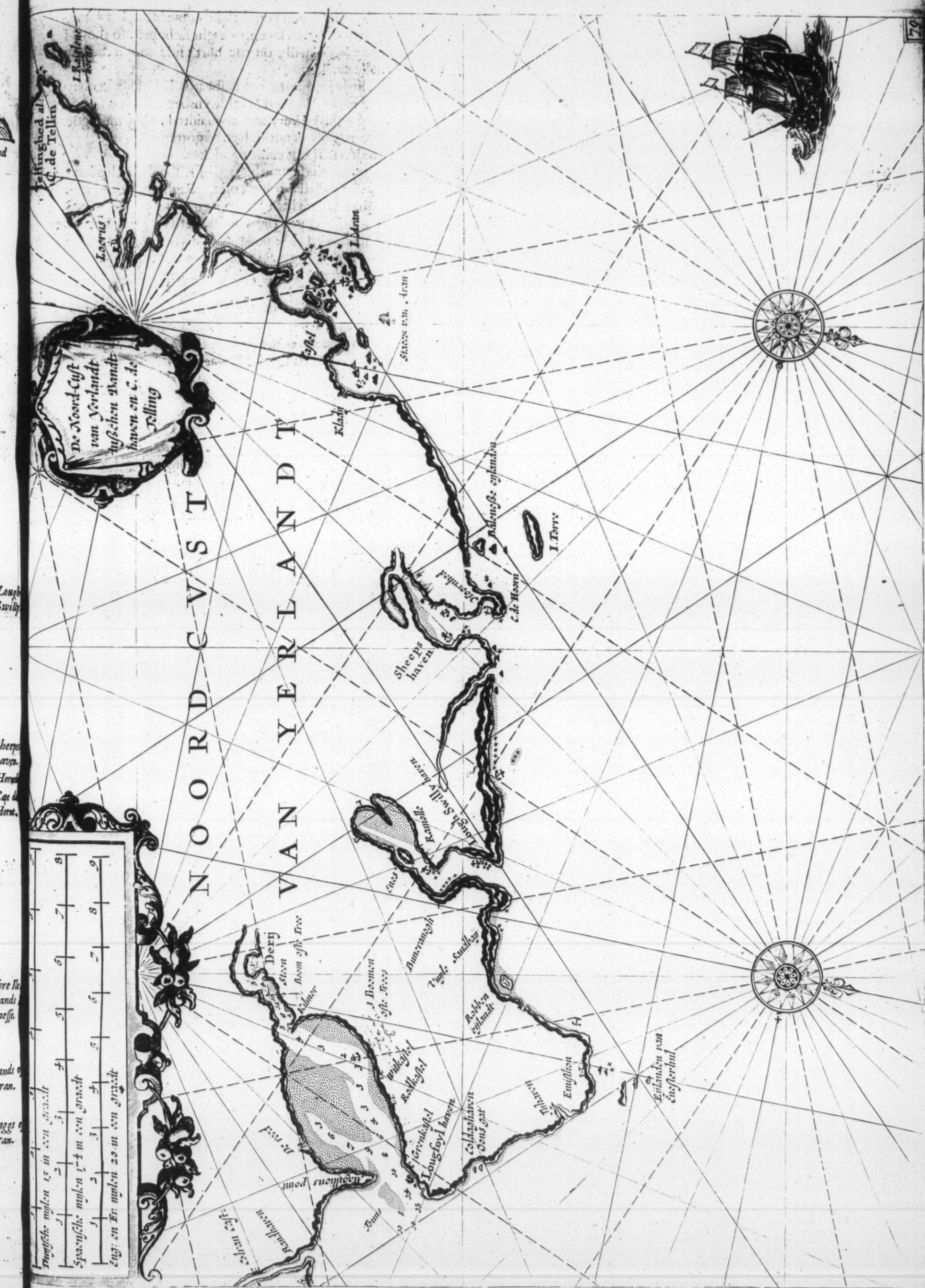
At the west side of this point, men may ride, and ancker within the rockes for easterly windes. Betwixt LoughSwilly and Sheepes-haven lieth also a Bay, where men may anker, but the ground is not very cleane, and right against it in the offing, halfe a league from the land, lieth a ledge of rockes, which at high water are under, and at low water ly above water, men may (for need) goe through betwixt it and the land, but without it is best and surest.

Westnorthwest about two leagues from C. de Horne, or Hornehead, lieth the Iland Tore, to the southwardes of it ly three Ilands, called the Ilands of Balenesse, men may faile through to the southwardes of Tore Iland, to wit, betwixt Ile Tore, and the Ilands of Balenesse, and also within the rockes.

From the Iland Tore to the Iles of Aran, the course is southwest and by south sixe or seven leagues, betwixt them both, not far from the Iland Aran, ly some high rocks, called the Staggs of Aran. Alongst all that coast betwixt Hornehead and the Ilands of Aran, is good ancker ground all over.

For to come to ancker under the Ilands of Aran comming out of the north, runne alongst by that great Iland, leaving it on the starboard side, untill you be within it: goe then towards the southwest, and ancker on the southeast side, there is the road. Men may also ancker in the Ilands over against it towards the maine, in divers places and ly landlockt for all windes.

Vpon



Vpon the northwest point of Ireland, a good waies landwardes in, lieth a high hill of fashion almost like a Sugar-loafe, which is seen in cleare weather before any other land, at least nine leagues at sea: when that hill lieth east and by south from you, and then faile in right with it, you shall not misse to fall right with the great Iland Aran.

Telling-head.
Cape de Telling.

From the Iland Aran unto the point Telling-head, called by the Irish, C. de Telling, or Tellin, the course is southsouthwest eight or nine leagues. Three or foure leagues to the northwards of C. de Telling, lieth an Iland called Raiglene borne.

Of the tides and course of the streames.

IN the haven of Loughfoil an east and by south, and west and by north moone maketh full sea. The flood commeth there out of the west and northwest.

At the Ilands Enesterhull, and in Sheepshaven an east and west moone maketh full sea. The flood commeth there out of the west.

Courses and distances.

From Loughfoil to the Ilands Enesterhull northwest 4 or 5 leagues.
From Enesterhull to Lough Swillie southwest 5 leagues.
From Lough Swillie to Sheepshaven westsouthwest westerly 4 or 5 leagues.
From C. de Horne, or Hornhead, to the Iland Tore west-northwest 2 leagues.
From the Iland Tore to the Iles of Aran southwest and by south 6 or 7 leagues.
From the Ilands of Aran unto Tellinghead southsouthwest 8 or 9 leagues.

Heights.

THe Ilands of Enesterhull at the northermost point of Ireland, lieth in five and fifty degrees and ten or twelve minutes.

C H A P. V I.

The West coast of Ireland, betwixt C. de Telling and Slynthead.



Alfe a league from land at the Cape Telling lieth a little Iland, men may faile through betwixt the Iland and the cape, boldly without any danger.

To the southwardes of Cape de Telling, to wit, betwixt the cape and the Stagges of Broadhaven, lieth the land with a great bay, wherein ly many good havens, as Tellinghaven, Kilbegh, Dungall, Ballashaven, Slego, Endrigo, and Moye.

Kilbegh.

From the Cape of Telling unto Kilbegh lieth the coast eastsoutheast about foure leagues: betwixt both, about one league and a halfe from the cape, lieth Telling haven, a round bay with good sandy ground, there may about thirty ships ly, west and southwest windes do blow there open in, for all other windes men are there land-lockt.

Kilbegh, or Kalebeg is also a faire round bay, but it is very narrow at the comming in of it: when men are a little from the shoare, it seemeth to be all close without any opening. About halfe a league to the westwardes, of this bay, a quarter of a league from the land, lieth a little Iland which is very low and plaine, at both ends going plaine downe, that is a good mark to know this foresaid bay, men may also faile through betwixt the Iland and the maine, if they will. When you come out of the west, and are passed that Iland then goe neere the shoare which is cleane and cleare, and goe freely close aboard of it, untill you shall see this bay open, and then faile boldly in without any feare, betwixt the two shoares there is nothing (neither in the going in, neither within in the bay) that can hurt you, if you doe not faile

upon the shoare. When you shall be come in, ancker where you please in five, fixe, seven, or eight fathome, so showld or so deepe as you will, on the north side within the bay stands a little castle.

About a little league to the eastwards lieth another bay within some rockes, called Mackswynsbay, but it is not to goe in except men be very well acquainted, they must goe betwixt the rockes in untill they be gotten in, there they may save a ship without cable or ancker.

A great league to the southwards of Kilbegh, lieth a long lying-out point called S. Johns point. Right west from that point, a quarter or a little halfe league, lieth a great rock under water, whereupon the sea breaketh with great noise. Betwixt that rock and the point of Saint Johns point, men may faile boldly through, it is there cleane and cleare.

About two great leagues to the eastwardes of the foresaid point S. Johns point, lieth the haven of Dungall, in to the southwardes. For to faile in there you must first shunne the easter shoare, which is very fowle with dry plates and rockes. When you are come right against a little Castle that standeth on the north side, right against it lieth off a little riffe from the shoare, that you must avoid also. And when you are come about the point of that riffe, you must goe over again to the north side, for the south side is there flat and showld. Betwixt S. Johns point and Dungall haven alongst the coast is all over good ancker ground.

The haven of Moy hath at the comming in a broad bay, in it ly some rockes. For to faile in there you must leave them all on the west side, that is, on the starboard side, and runne towards a little sandy Iland, that hath at the north end a little riffe, you must goe into the westwards of it, and leave that Iland on the larboard side. Even within that foresaid Iland, lieth another little round green Iland, that must bee left on the starboard side, so soone as you shall be right against it, you must let fall your ancker, for a little further it is showld and hard sandy ground, the greatest ancker must be brought towards that foresaid long small Iland, and the small ancker towards the little green Iland, it falleth there at low water alwaies dry. If you will goe from thence before the towne Moye, you must light your shippe to eight foot, for to come through betwixt the long small Iland, and the south grounds, there is at high water with an ordinary tyde no more then nine foot water; being come over that neck, you shall come into a poole before the towne Moy, there you may ride afloat at low water. In the road against the Iland it is 15 or 16 foot deepe.

The Staggs of Broad haven are rockes that ly to the northwards a league or a league and halfe a seaboard of the point to the northwardes of Broad haven.

Broad haven lieth in south and by west, in the sound ly three or foure rockes, these must be left on the larboard side, and runne in there alongst to the westwards, untill you come within the haven.

A great league to the westwards of Broad haven lieth an outer point southwest from the Staggs. From thence lieth the coast alongst to Blackrock southsouthwest, Blackrock is a great high black rock with more other rocks by it, lieth from the foresaid point southsouthwest distant about fixe leagues, and about a league northwest from the out point Ackelhead.

Ackelhead is a very high point, sheweth it selfe a farre off like an Iland with a great saddle, thereby it is good to be knowne. Within this point ly also two exceeding high hills, which together with the point men shall see first at sea before any other part of the land, so that the point doth shew it selfe first like three Ilands. Men may faile through betwixt Ackelhead & Blackrock; comming from the southwardes men doe leave Ackelhead on starboard, and Blackrock (with the rockes thereby a seaboard) on larboard, and the course lieth through betwixt them both northnortheast and north and by east, unto the point of Broad haven, it is there large and wide.

To the northwardes and to the eastwards of Ackelhead, ly divers havens, where is good riding, a little to the northwardes of Ackelhead, you may runne in to the westwardes, betwixt

Mackswynsbay

S. Johns point.

Dungall haven.

Moye.

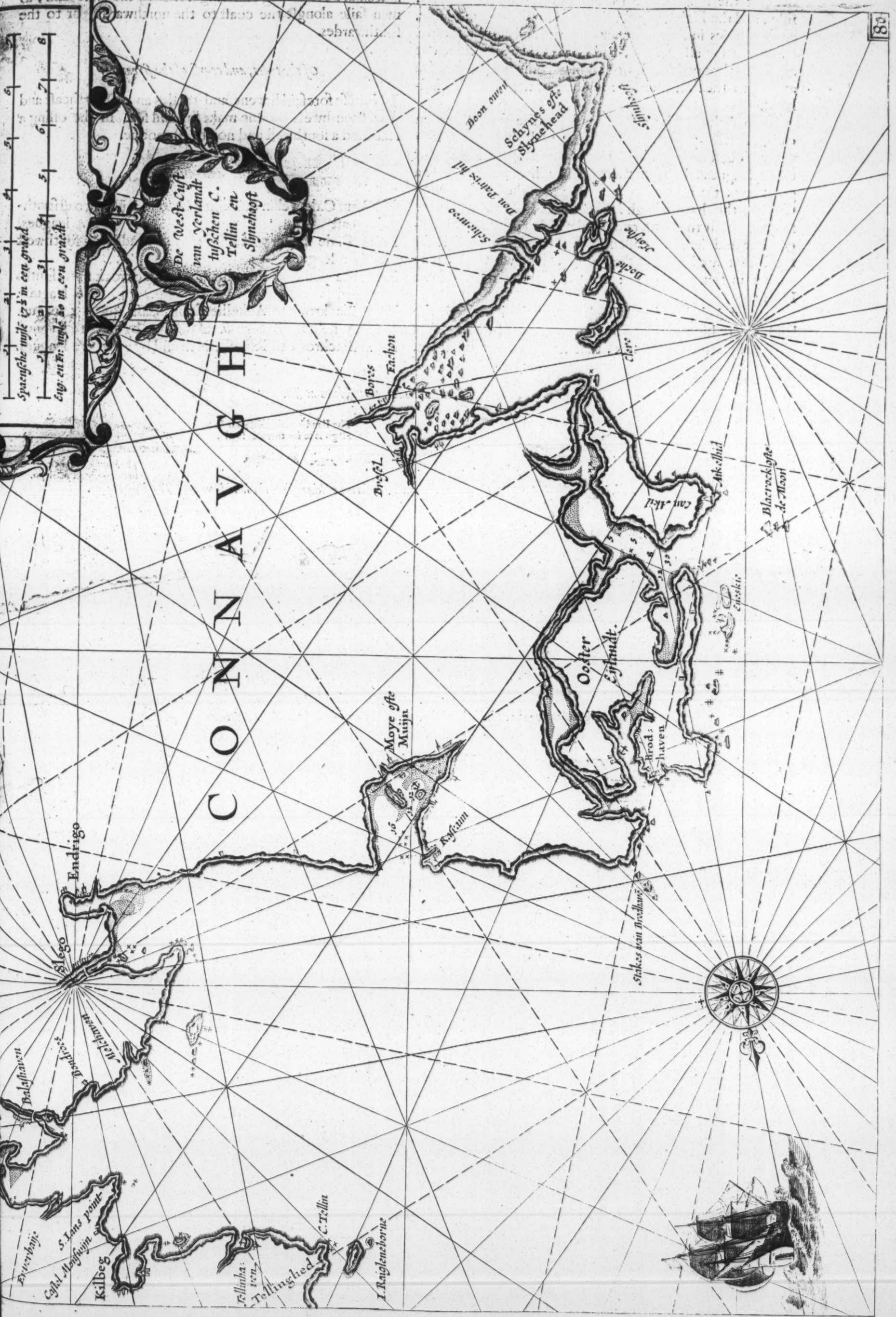
Staggs of Broad haven.

Blackrock

Spanische mijle 17 1/2 in een graed
 Eng: en Fr: mijle 20 in een graed



CONNAVGH



betwixt the low land to the northwardes on the larboard side, and the high land of Ackelhead on the starboard side, a great waies in, and ancker in seven and eight fathome, landlockt for all windes, and from thence may come out againe to the northwardes, or els may come out into the sea againe to the southwardes round about the land of Ackelhead.

From Ackelhead to Slynthead (by the sea-faring men called Twelve-pence, because the land doth shew it selfe in twelve round hommockes) the course is south and by east tenne leagues, betwixt them both ly three Ilands before a great bay, the northermost or next to Ackelhead is called Cleere, this hath a high hill on the north end that is very steepe, and at the south end it is flat going downe. The second or middlemost is called Boche; within it is a road, for those that are bound to the southwardes, where men may ancker in foure fathome: the southermost is called the Horfe.

Betwixt Ackelhead and Twelve-pence lieth within in the land, a very high hill like a Sugarloafe, called S. Patrickes hill, or by some Don Patrix, that may be seen farre at sea,

and shall be seen long, altering it selfe by the cliffe land, as men saile alongst the coast to the northwardes, or to the southwardes.

Of the tydes, and course of the streames.

IN these foresaid havens and roades an eastnortheast and westsouthwest moone maketh a full sea. In the offing a seaboard a southwest and northeast moone.

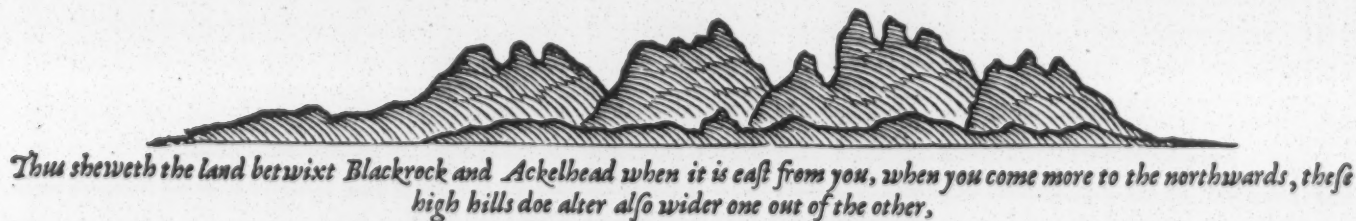
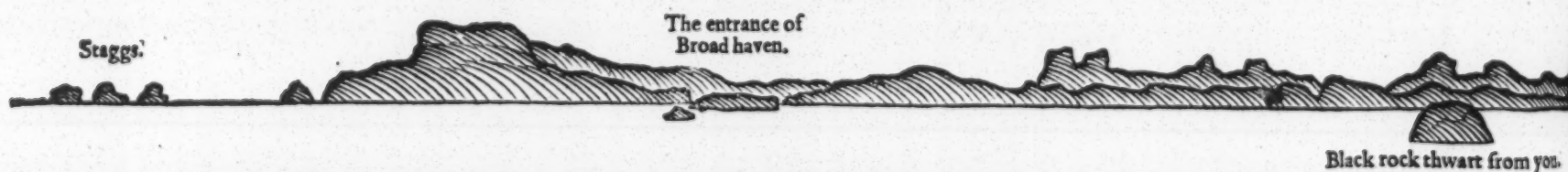
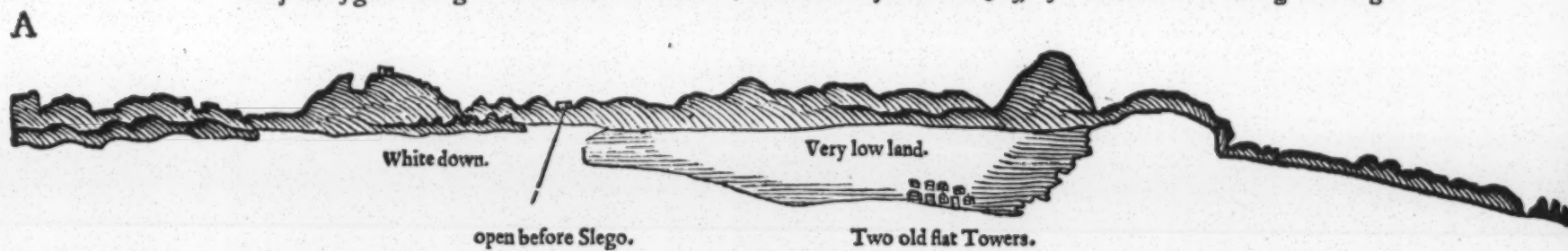
Courses and distances.

From C. de Tellin or Telling head to Kilbegh eastsouth-east 4 leagues.
From C. de Tellin to the Staggs of Broadhaven south-west 11 leagues.
From the point of Broadhaven to Blackrock southsouth-west 6 leagues.
From Blackrock to Ackelhead southeast 1 league.
From Ackelhead to Slynthead south & by east 10 leagues.
From Blackrock to Rokoll north and by west 60 leagues.

How these lands doe shew themselves at sea.



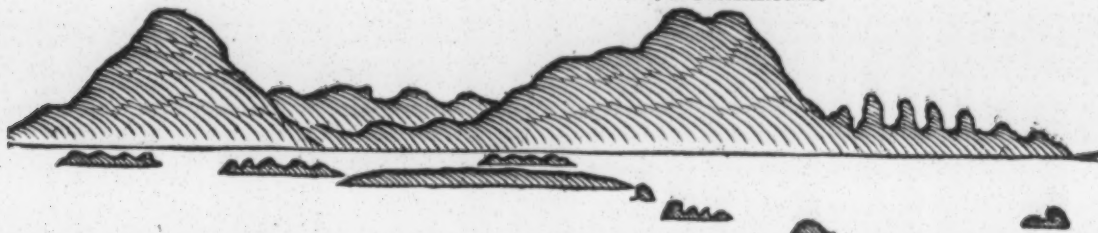
These two figures belong at the A A one to the other, and shew the forme or likenesse of the land betwixt Kilbegh and Slego.



Blackrock.

Thus sheweth the point of Blackrock when men are to the southwards of it, then they see a sharpe rock over the point, like as it were a spire steeple, but it is a high sharpe rock lying at the north side.

Dón Patrickes, or Patrickes hill.



Thus sheweth S. Patrickes hill when it is southeast and by south from you, being not farre from land, at the north side of it ly some little islands and rockes.

S. Patrickes Hill.

Blackrock.

Thus sheweth the second point to the northwardes of Blackrock, lying in the height of 54 degrees and a halfe.

C H A P. VII.

The Coasts and Havens betwixt Slynthead and the Blaskeys.



From Slynthead, or Twelve-pence, unto the Sound of Saint Gregories, before the Bay of Galloway, the course is south-east nine leagues.

Before the Bay of Galloway ly three great Ilands, called the Ilands of Aron, the northermost is the greatest, the channell betwixt the northermost and the middlemost, is called the sound or Saint Gregorie, which is on both sides cleane without any fowle ground, so that men may turne in to and againe from the one land to the other, without feare of taking any hurt. The north side of the middlemost Iland is nothing else but faire steepe rockes: when you are come within the Ilands, you must shun the middlemost, because of a little riffe that lieth off it.

Men may also saile to the northwards of the northermost Iland, into the great Bay of Galloway, likewise also to the southwardes of the southermost, to wit, through betwixt the southermost Iland, & the maine land, but that Iland is fowle at the south end of it, and therefore you must run in alongst close by the south shoare, or at least leave two third parts of the channell towards the Iland, as well in sailing in as in sailing out.

Somewhat within the Ilands, on the south side, lieth a high black point, called Blackhead, you must beare in to it, and alongst by it in, wether you come in at the souther channell, or through S. Gregories Sound, or els in at the norther channell, for the north side of the Bay is fowle and rocky. About two great leagues northeast from Blackhead, lieth an Iland called Motton-Ile, under it on the east side you must ancker in a poole in five or sixe fathome.

You cannot saile further up to the northwards into the river with shippes, but onely with boats. A northeast and southwest moone maketh there full sea, and it floweth there so strong in the bay, that the rockes which at low water are above water, at high water you may saile over them; at low water the spring tydes, the grounds fall dry westsouthwest from Motton-Ile, a great league & halfe off, most all rocky and fowle ground.

When you saile from Blackhead towards Motton-Iland, you must take heed of the north side, and edge over most towards the south side. About halfe waies betwixt them both, lieth a plate or ledge neereft the north side, you must goe in alongst by it to the southwardes.

From the Bay of Galloway to Lupishead, the north point

of the haven of Limbrick, the course is southsouthwest nine or ten leagues. About halfe waies betwixt them both, lieth a little Iland that is fowle round about with ledges of rockes that ly off to seawardes at least a league and a halfe a sea-board the land.

To the southwardes of the point Lupishead goeth in the haven of Limbrick. Three or foure leagues eastnortheast within the foresaid point, lieth an Iland called Seatrix, you must saile alongst without it to the southwardes, and leave it on the larboard side in sailing up. At the east side of that Iland is a good road. Vpon this Iland Seatrix doe dwell the sworne Pilots, when you come there over against, you give a warning shot, they must come, and bring you where you would be. About halfe waies betwixt that Iland and Lupishead, lieth a showld which you must shun, and saile alongst to the southwardes of it. From the Iland Seatrix unto Limbrick, are more then twelve or thirteene leagues, first from thence to the Iland Quoyne foure or five leagues, there are two low Ilands, you must saile close alongst to the northwardes of them: from thence eastnortheast unto a great rock called the great Beefe, and then southeast unto another great rock called the little Beefe.

When you are come before the towne in the haven, you must make fast on the Castle with three or foure cables, for there goeth a very strong tyde as well of flood as of ebbe. An eastnortheast moone maketh there full sea.

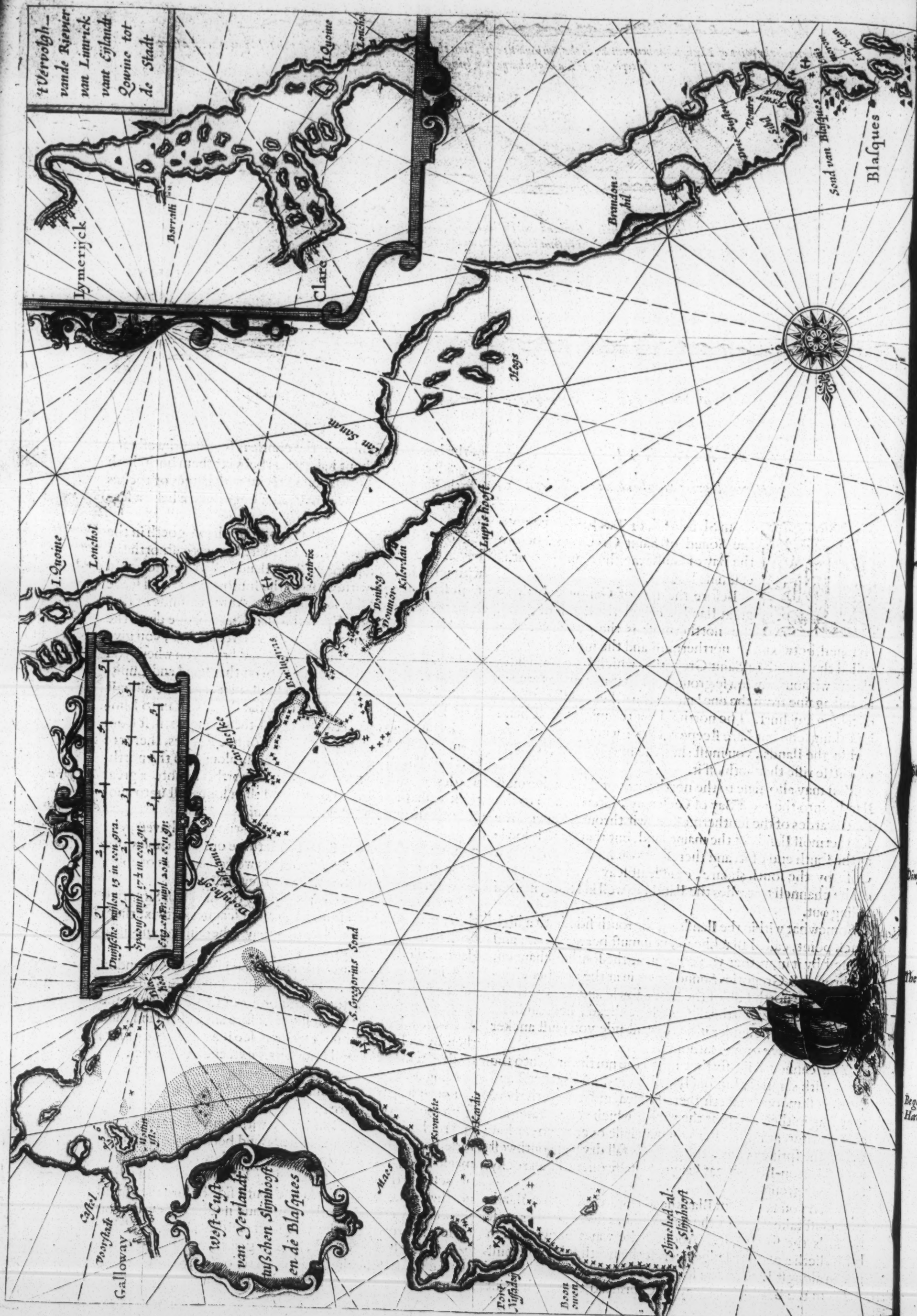
From the haven of Limbrick to the haven of Smerrick the course is southwest seven or eight leagues, betwixt them both lieth the coast with a great bay wherein ly some little Ilands called the Hoggs.

A little to the eastwardes of Smerrick lieth Sinbrandon hill, a very high hill, which lieth in height above all other lands thereabouts, they that come out of the sea from the westwards shall see that hill first before any other land, and thereby easily know it: men may see it at sea in the offing, twelve, fourteene, and sometimes sixteene leagues off, according as the weather is cleare.

Foure leagues westsouthwest from Smerrick, a little off from the land, ly foure or five Ilands, being high round hills and rockes called the Blaskeys, with some other rocks and little Ilands about them. The Sound betwixt them and the maine land, is called the Sound of Blaskeys, lieth through neereft northwest and southeast. He that is bound to the northwards, may ancker at the south side before the Sound for westerly and northerly winds, and not be in-bayed upon no lee shoare: For if the wind shift easterly, hee may either goe through the Sound, or els goe about a seaboard the Blaskeys. If the wind shift westerly or southerly, he may runne through the Sound, and further his voyage. There runneth

Haven of
Limbrick
Seatrix

The great
and little
Beefe rocks



Uitvervolgh-
vande Rievier
van Limerick
vande Eylandt
Lough-
Lough-
de Stadt

Limerick

Clare

Brundon-
hil

Blasques

Sond van Blasques

Lough-
Lough

Lough-
Lough

Canal

Sligo

Lough-
Lough

Sligo

Sligo

Sligo

Sligo

Sligo

Sligo

Sligo

Sligo

Sligo

Sligo

Galloway

West-Cust
van Verlandt
tusschen Slighoof
en de Blasques

Mass

Kroncke

Kardie

Port-
Vissadoy

Boon
suen

Slighoof
Slighoof

Dingle

The C

Begem
Haven

runneth through a very strong tyde, as well of the flood as of the ebbe, which must be considered.

Of the tydes.

IN all these havens an eastnortheast and westsouthwest moone maketh full sea; But in the offing a northeast and south moone.

Courses and distances.

From Slynthead unto the bay of Galloway, southeast 9 leagues.

From the Bay of Galloway to Lupishead the north point of Limbrick haven southsouthwest 9 or 10 leagues.
From Lupishead to Smerrick southwest 7 or 8 leagues.
From Smerrick to the Blaskeys westsouthwest 4 leagues.
From Slynthead to Sinbrandonhill south and by west 22 leagues.
From the Bay of Galloway to the Blaskeys, southwest and by south 23 leagues.

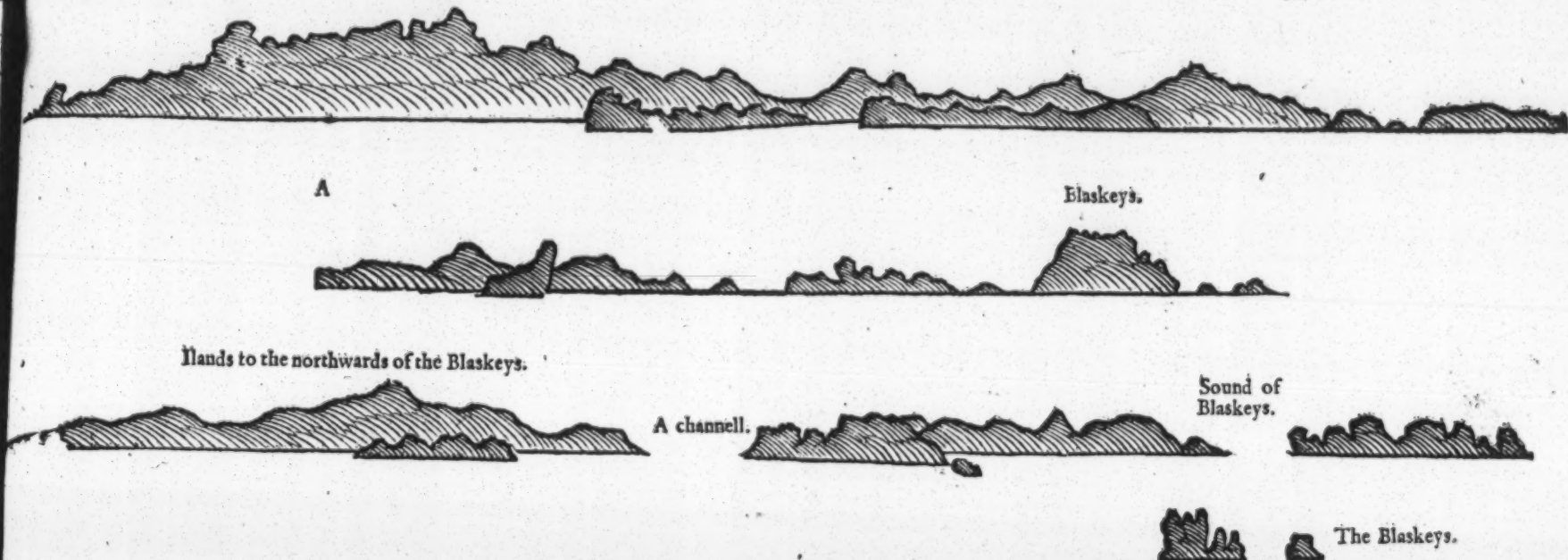
Heights.

The river of Galloway lieth in 35 degr. 10 min.

How these lands doe shew themselves at sea.

The land of C. Kerry, or Sinbrandonhill (by some called Devilshill) unto the Blaskeys, lying northeast and by east five or six leagues; sheweth as is pictured out in these two figures, when the foresaid hill of Sinbrandon is eastsoutheast from you three or foure leagues.

C. Kerry, or Sinbrandon hill.



C H A P. VIII.

The Coasts of Munster betwixt the Blaskeys and Mizanhead.

Even or eight leagues to the southwardes of the Blaskeys, ly three great rocks called the Skellokes, the eastermost about a league, and the westermost two great leagues a seaboard the land, when you come from the southwardes and see them first, they shew like failes of Shippes. Betwixt the Skellokes and the Blaskeys goeth in a great broad Bay deepe into the land, called Dinglebay, with divers havens in it.

About a league and a halfe from the Sound of Blaskeys lieth a haven called Ventrie, a great league to the eastwards of it another called Dingle, or Dingle Couch, it lieth north and by west in, at the west point of it lieth a rocke called the Crow, which is cleane round about, so that men may saile round about it on both sides, without taking any hurt, at high water with spring tyde, it floweth even under water. This haven of Dingle and the Skellokes, ly northeast and by north, and southwest and by south distant eight leagues.

Northeast from the Skellokes, southeast from the Sound of Blaskeys, and south and by east from the Ventrie, lieth a haven at the east end of the Iland Valentia, called Begenny, which lieth eastsoutheast in, you must give the east point of the Iland a birth off, because it is fowle, and lieth a good waies off: there lieth also a suncken rock on the Iland side, which you must take heed of when you are come within the entry of the haven, you must goe east and by north unto the road, which is right against a red cliffe that lieth on the south side.

The Skellokes and the Cape Dorsey ly northwest and southeast seven or eight leagues asunder: betwixt them both goeth in also a great broad Sound, northeast in, wherein ly many Ilands, havens, and roads.

West. Water. iij. Booke.

Cape Dorsey is an Iland within which men saile and ride under. For to goe in there from the southwards, you must give the east side a birth, that is, the side of the maine land, which is fowle, and run in alongst by the side of the Iland, untill you be come within, and ancker there.

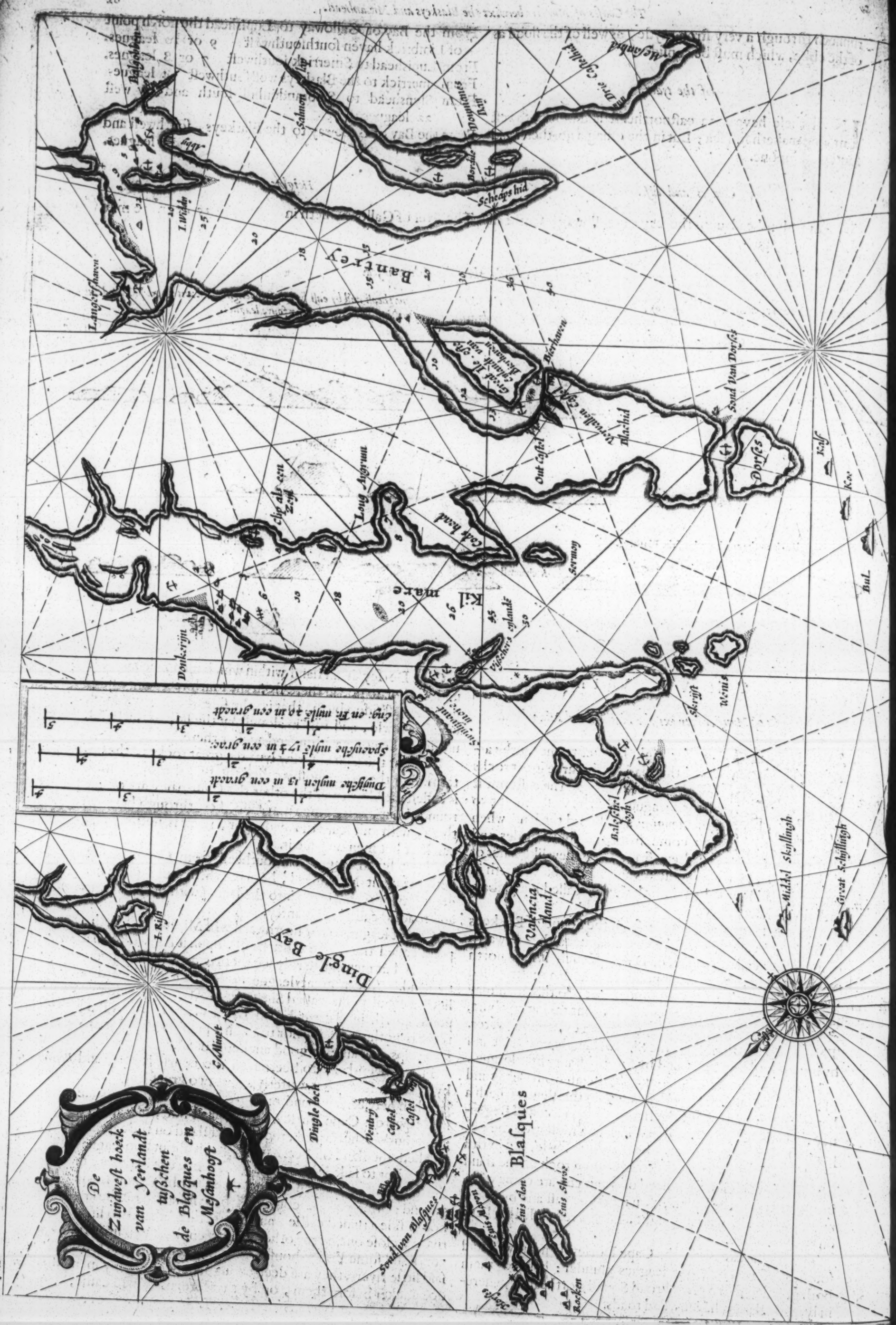
Without the Cape Dorsey ly three great rockes, the outermost or the westermost is called the Bull, the middlemost is called the Cow, and the other the Calfe, they are cleane round about, so that men may saile there through between them, with out feare of any danger, there is nothing that can hurt but men may see it.

About seven leagues eastsoutheast from Cape Dorsey, lieth the point Mizanhead, betwixt them both goeth in a great Bay or river, deepe into the land (with divers havens and roades) called the Bantry.

A great league to the northwardes of Mizanhead, lieth a point called the Three Castlehead, upon it stand three flat Towers, but men can hardly see them except they be neere the land. Also a great league more to the northwardes, lieth a small point called Sheepshead. Betwixt these two points goeth in a great broad Bay called Dounams Bay, there is nothing to doe nor to fetch, but it is a fit place to save ships, and all over good ancker ground.

From Sheepshead to Beerhaven the course is north and by west, or somewhat westerly about two great leagues, it goeth in between an Iland on the east side, and the maine land towardes Cape Dorsey on the west side, it is about a great musket shot broad, the foresaid Iland on the east side is called the Iland of Beerhaven, and is about two leagues long. For to saile in there you must keepe the midway, in the entry of the haven it is cleane, without any fowle ground: after you be come in, there standeth on the larboard side a ruined castle, and a little further are two little rivers, close one by the other, between these two little rivers stand some Fisher-houses. Men may saile into the foresaid little rivers, they are deep enough, but commonly men doe ancker before them, or by that foresaid ruined castle,

L or els



De
Zuidwest hoek
van yerlandt
tuschen
de Blasques en
Mesanhoof

Blasques

Dingle Bay

Valencia
Island

Long Antrum

Bantry

Middel Skyllingh

Great Skyllingh

Sand Van Dorset

Dorset

Out Castel

Serway

Kil mare

Cat head

clap als een
zeep

Donkerijn

Langorshaven

Abby

Salmon

Scheeps lid

one cghalle

Mesand

Royale mountains

Great le ghe

Bishaven

Verallen cgh

thachid

Kalf

Kor

Bul

Wenis

Skryjn

anischel
logh

Swilgunt
more

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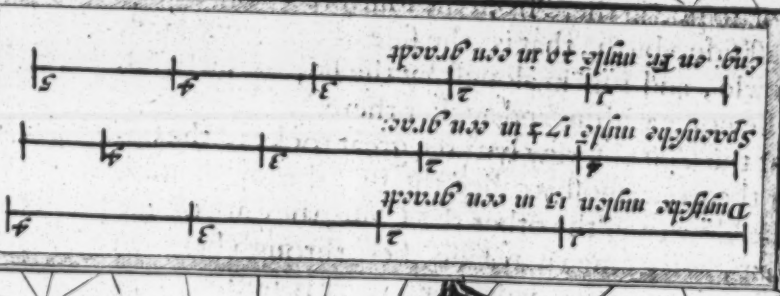
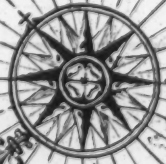
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or els somewhat further in, it is all over good anckering, and cleane ground, except right against the foresaid little rivers, ly some rocks about the middle of the channell, which at high water are under, and at low water ly above water, these onely must be shunned, but men may goe on either side of them. Somewhat further in the bay standeth another castle called Old castle, from thence men may saile alongst to the northwards of the Iland Beerhaven, and come out to the eastwardes, into Bantry. The Sound on the north side of the Iland is large, broad, and cleane, 13, 12, and 10 fathom deepe. The east point of the Iland is a sharpe point, and very fowle; there lieth off a ledge of rockes, whereof some ly under water, and some above water at low water, but the side of the maine is cleare and cleane. In this entry ly also two great rocks high above water, but cleane round about, men may runne through between these rocks, or to the southwards, betwixt them and the foresaid ledge of rockes, or also to the northwardes alongst betwixt them and the maine land, as well in comming in as in sailing out, there is no danger more then men may see.

From Beerhaven to the north point of the Iland Whiddy, lieth the Bantry eastnortheast and northeast and by east 6 or 7 leagues: over against Beerhaven in the middest in the fareway, it is deep 40, 36, and 30 fathome, within the Iland, 15 and 16 fathom, but further in towards the Iland Whiddy, it is againe 20, and 25 fathome deepe: men may saile round about the Iland Whiddy, (which is about a league long) but to the northwardes it is best.

For to saile in about to the northwardes, or to the eastwardes, men may goe in close by the north or east point, but a little within the point, lieth a little ledge of rockes, a little musket shot off from the shoare, which at high water lyes under, but at halfe ebbe beginneth to come above water; that onely is there to be shunned, being passed that, you may ancker all over. About that foresaid point ly two small Ilands, by the greater men may saile alongst on both sides of it, either within it or without it, untill before a Gentlemans house which is white, upon the Iland Whiddy, and ancker there against it in 3, 4, or 5 fathome, so deepe or so should as men will, according as men desire to ride neere or far from the shoare, it is there all over cleane ground.

He that will saile in to the southpoint of the Whiddy, had need be very well acquainted, it is there to the southwards betwene the Whiddy and the maine land, at most places fowle and stony. From the west side of the Whiddy, ly also some fowle ground and rockes, somewhat off the Iland to seawards, some above, and some under water.

To the southwardes of the Whiddy upon the maine land, standeth a Friery or Abbey, called by the Irish the Abbey, right against it is the common road, and it is very good ground in four, five, or fixe fathome, according as you shall

ride farre or neere to the shoare, to the northwardes lieth a little Iland so low in the middest, that a spring tyde the sea floweth over, and divideth it in two.

A little league to the eastwardes of the Abbey lieth a little towne upon a little river called Balgobben, at high water men may goe up there with there boat, but at low water it falleth drye.

A great league from the east point of the Whiddy, west-northwest lieth a haven called Langerf, when you shall saile from the foresaid point towards it, you shall meet right in the fareway, about halfe waies over, a great rock which may be failed about on both sides, but it is best on the off-side. The off-side is cleane and cleare, but on the inner-side lieth some fowle ground. He that will saile through on the inner-side, had need to be very well acquainted. The foresaid haven of Langerf lieth northnorthwest in: Even within it in the entrance on the starboard side, lieth some fowle ground, which at low water (the Spring tydes) may be seen drye, these must be shunned, or els it is there within all over good anckering and good ground, there is no more danger, but men may see it.

When a man is neere the Iland Whiddy, about middest of the bay, he cannot see the land without the Iland Beerhaven on the west side of the Bay, because it falleth away so alongst to the westwardes.

of the tydes.

IN all these foresaid havens maketh high water an east-northeast and westsouthwest moone, or a point later, according as they ly deepe within the land. But a sea-board the coast in the offing, a northeast and southwest moone.

Courses and Distances.

From the Sound of Blaskeys unto the Skellocks, the course is south 7 leagues.
From Dinglehaven unto the Skellocks, southwest and by west 8 leagues.
From the Skellocks unto the Dorseys, f. e. 7 or 8 leagues.
From the Dorseys to Mizanhead e. f. e. 7 or 8 leagues.
From Mizanhead to Sheepeshead north 2 great leagues.
From Sheepeshead to Beerhaven the course is north and by west somewhat westerly, scarce 3 leagues.
From Mizanhead to Beerhaven north & by west 5 leagues.
From Beerhaven to the Iland Whiddy the course is east-northeast and northeast and by east 7 or 8 leagues.
From the Dorseys to Silly southeast & by east 56 leagues.
From the Dorseys to Cape de Finisterre is the course south and by east and south 173 leagues.

How these lands doe shew themselves at sea.

Northnorthwest,

The land to the eastwards thwart of the Blaskeys,

The Blaskeys.

Sound of Blaskeys.

The Blaskeys and the land to the eastwards of them, doe shew themselves thus when you saile from the Skellocks towards them.

An entrance.

All double ragged land.

The Skellocks.

Thus sheweth Skellocks with the land to the eastwards or to the northwards of them, when you are somewhat to the northwards of them, and saile alongst by them.

When you are by the Skellocks, then the Ilands lying to the northwardes and to the eastwardes of them shew themselves thus.

This is an entrance.

These Ilands ly to the southwards and to the eastwards of Skellocks, the land from thence eastward towards the Dorseys, is all high broken and very ragged land.



This Iland lieth betwixt the Skellokes and the Dorseys close by the land.



Thus sheweth Dorseys with the rockes, Bull, Kow, and Calfe, which ly without them when they are to the southwards of you.



This and the figure following belong at the A A one to the other.



When you are to the eastwardes or to the southwardes of the Dorseys, they shew as is pictured out in these two figures here before. The east end at B sheweth almost like Cape Cleare, being east from you, but it is a higher land.

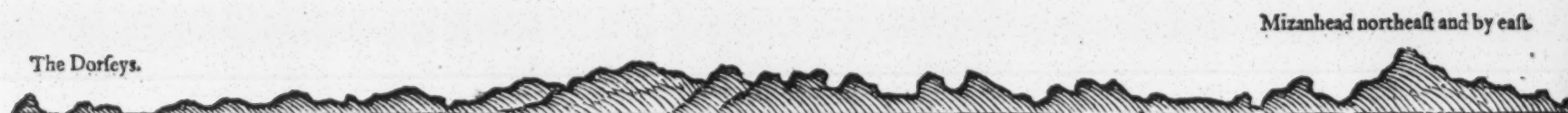


Hilly and very ragged land.

These two figures belong one to the other at the A A.



When that cape Cleare is eastnortheast from you, and Mizanhead northeast and by east, then is the land unto the Dorseys in these formes, as is sheweth in these two figures here before.



When that Mizanhead is northeast and by east about two leagues from you, then sheweth the land to the northwards of it towards the Dorseys thus. And then may you also see the Iland of C. Cleare east from you.

C H A P. I X.

The Coastes of Munster betwixt Mizanhead and the old head of Kinsale.



Crookhaven.

From Mizanhead unto Cape Cleare the course is east and by south distant seven leagues. About three leagues within or to the eastwards of Mizanhead, north-west from C. Cleare, lieth a haven called Crookhaven. He that commeth from the east, and is bound in there, must run alongst by C. Cleare, up about it to the northwards, so farre untill he may see through into sea to the northwards of the Iland of C. Cleare, as through a hole, and set then his course westnorthwest, keeping that foresaid hole (to the northwards of C. Cleare) open, then he shal fall right with Crookhaven, which lieth in westsouthwest. And there he may ancker before the little towne in three fathome, and two fathome and a halfe. It was wont heretofore to be deeper there, but it is spoiled most by casting of ballast, men may also ancker further out then before the towne, there it is deeper, and all over cleane ground.

Fastney-rock.

Schoolhaven.

Ile Sherke.

Baltemoore haven.

Two little leagues west and by south from C. Cleare, lieth a high steepe rock alone in the sea, called Fastney, which sheweth at first sight like unto a saile, north and by west three or foure leagues from this rock lieth a haven called Schoolhaven.

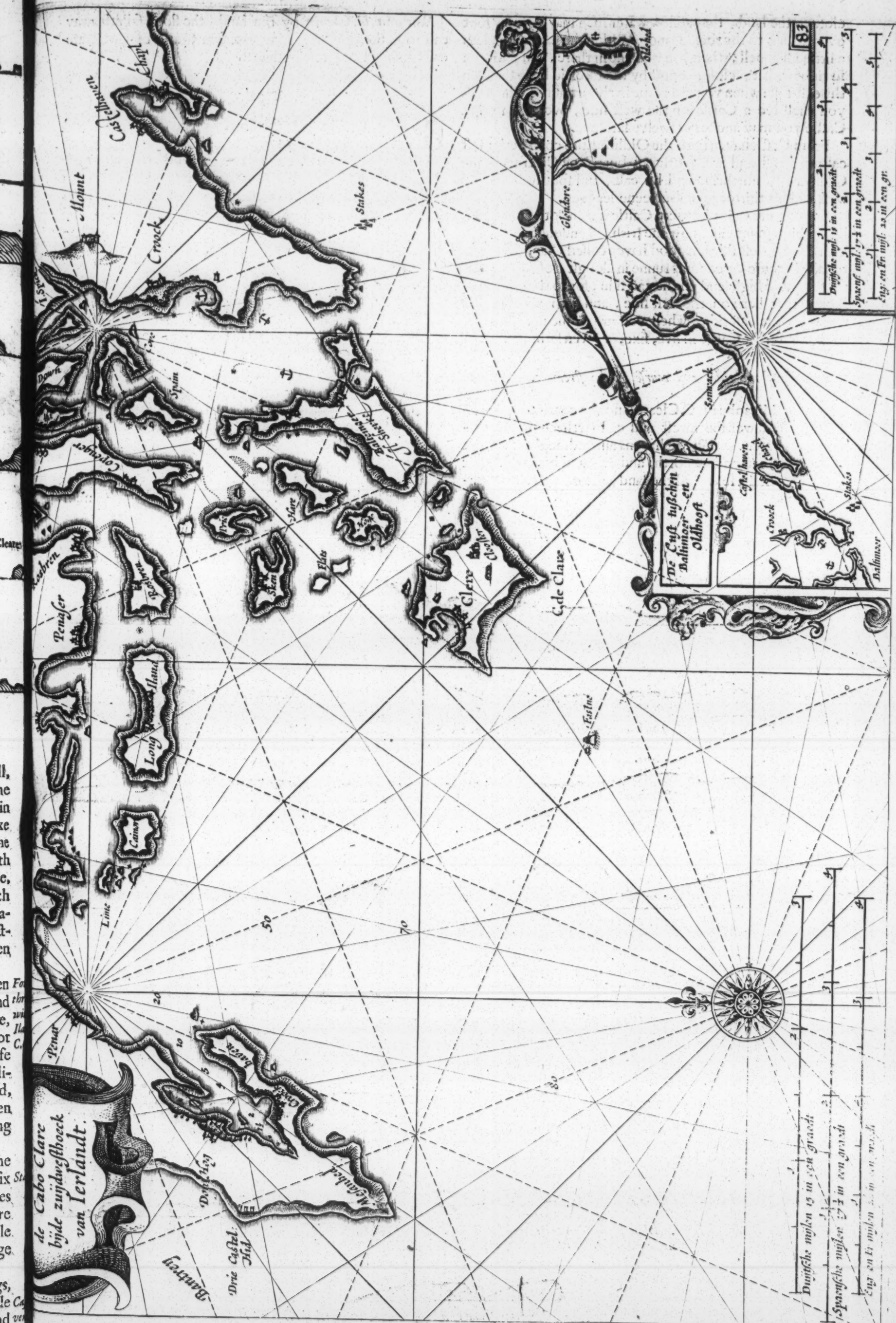
A little to the eastwards of the Iland of C. Cleare, lieth another Iland called Ile Sherke. To the eastwards of it, betwixt that Iland and the maine land, goeth in a haven called Baltemoore haven: It is somewhat narrow at the mouth of the haven, but within the mouth of the haven it is large and

broad, there may you ancker on both sides where you will, and ly landlockt for all windes. On the west side within the haven standeth a Friery, close before it you may ancker in five and sixe fathome; in the middest of the haven it is sixe and seven fathome deep. A little to the northwardes of the foresaid Friery, standeth a castle upon a point. In the mouth of the haven lieth a suncken rock, neereft to the east side, and within in the middest of the haven lieth a rock, which at high water lieth under, and at low water lieth above water, there is nothing els that can hurt. A little to the eastwardes without the haven, lieth another rock fixe or seven shippes lengths from the shoare.

To the northwardes of the Iland of the Ile Sherke, men may goe to the westwards through betwixt Ile Sherke, and the Iland Spain, and come out againe into sea by C. Cleare, but it is to bee done onely with small shipping, and yet not without danger. Betwixt Ile Sherke and Spain, is at halfe flood not more then twelve or thirteene foot water. At divers other places betwixt these Ilands it is rocky & showld, so that it is not good to goe through within, except men bee very well acquainted, and yet at high water and spring tydes.

A little league to the eastwardes of Baltemoore ly the Staggs, an English mile from the shoare, they are five or six high steepe rockes. When men come from the eastwardes alongst by the shoare, and get first sight of them, they are like unto some spirie towers together, men may saile through betwixt them and the maine land, it is there large and broad enough.

Northeast about two leagues from the foresaid Staggs, lieth Castlehaven, without it on the east side lieth a little Iland, you must leave it on starboard side in sailing in, and another little flat Iland on the larboard side, that lieth so close



de Cabo Clare
bijde zijduyghshoek
van Ierlandt.

de Euyt tuschen
Bathuizer en
Oldhoof

83

Duytsche myl 15 in een graad
Spaensche myl 17 1/2 in een graad
Eng en Fr myl 20 in een gr.

Duytsche myl 15 in een graad
Spaensche myl 17 1/2 in een graad
Eng en Fr myl 20 in een gr.

close to the land, that at low water men may goe dry foot over from it to the maine land. Within the haven standeth a little Chappell, when you will saile in there, you must run in right with it, close alongst by the foresaid little Island on the east side: when you are come in, thwart of the Chappell, you shall see a Castle on the west side, over against that Castle you may ancker in twelve fathome.

From Castlehaven unto the Oldhead, the coast lieth most eastnortheast and westsouthwest but Cape Cleare and the Oldhead ly northeast and by east, and southwest and by west, distant thirteene or fourteene leagues.

Kendonetedo.
Clandore.

About halfe waies betwixt Castle haven & the Oldhead, lieth a high point called by the Irish, Kendonetedo, there by it on the west side is a good haven called Clandore: For to saile in there, you must runne in alongst close aboard by that foresaid high land on the east side, for to shun a rane of rockes that lieth on the west side, and lieth off somewhat towards the east side: when you are come in, you may ancker before a Castle in five, fixe, or seven fathome.

Of the tides and course of the streames.

AT the Mizanhead, C. Cleare, and the coasts to the eastwards, a westsouthwest and eastnortheast moone maketh high water, within the havens and indraughts, a point later, to wit, east and by north, and west and by south. But in the channell a seaboard the land, a northeast and south-west moone.

Without C. Cleare by the land, the flood falleth away east, and the ebbe west, but to the eastwards of C. Cleare eastnortheast and westsouthwest.

Depths.

BETWIXT C. Cleare & the Dorseys men may see the land in eight and fifty and sixty fathome.

From C. Cleare to the eastwardes unto Waterford, men may see the land in five and fourty fathome. The most part of the south coast of Ireland men may see it in five and thirty and fourty fathome. In five and thirty fathome you shall not be farre from the land. Therefore come no neerer Ireland by night then in fourty fathome.

Courses and distances.

FROM Mizanhead to C. Cleare e. & by f. distant 7 leag.
From C. Cleare to Crookhaven n. w. 5 leagues.
From C. Cleare to C. Veelo or Oldhead e. n. e. 13 leagues.
From Cape Cleare to the Lands-end of England southeast and by east 53 leagues.
From C. Cleare to Silly southeast 47 leagues.
From C. Cleare to C. de Finisterre south 173 leagues.

Heights.

C. Cleare lieth in 51 degr. 12 min.

How these lands doe shew themselves at sea.



The forme of C. Cleare with the rock Fastney.



Rock a little to the eastwards of Baltemore.

This belongeth to the figure going before the AA one to the other, is the land to the eastwards of Baltemore.



C. Cleare.

Thus sheweth C. Cleare when it is north from you five leagues, and there it is 68 fathome deepe.



C. Cleare sheweth thus being north and by west from you.

C. Cleare.



Sharpe hills within

The Cape Cleare being northwest seven or eight leagues off from you, sheweth thus. If you then beare in north, you shall fall right with the Oldhead, and when you come neere the shoare, you shall lose sight of the high land, and it shall seeme to be all low land.



Land within.

Land within.

Land within.

A

This followeth the former figure, the eastermost bommockes at A are the high hills about Iochull, which you shall hardly see when cape Kleare is northwest from you seven or eight leagues off, they ly farre within the land, and the clouds oftentimes hang over them.



C. Cleare.

Oldhead.

Point of Corck within the Island.

Hill within Iochull.

When you are before Oldhead two leagues, or two leagues and a halfe a seaboard the land, then sheweth the land to the westwards unto cape Kleare, and the land to the eastwards of Oldhead, in this forme.



When the point of Rosse is west and by north from you, it sheweth thus.

C H A P. X.

The south coast of Ireland from Oldhead to Waterford.



He Oldhead, or C. de Velho, is a point that lieth out farre without the other land, the outermost south end of it is very high and steepe, when you come alongst the shoare from the east or from the west, and see it first, it seemeth to bee an Iland, upon the top of it standeth a ruined castle with three Towers, whereof the middlemost is the highest. On both sides of this out-lying point, men may ancker so deepe or showld as they will.

About two leagues north and by east from that point, lieth the haven of Kinsale, lying in northnortheast, you may faile in there, keeping the middle of the channell, there is no danger, neither without nor in the harbours mouth, but one suncken rock close by the east point. When you come in from the Oldhead, or from the southwards, and you keep an old ruined castle (that standeth within the haven on the east side) even without the Innermost east point of the haven, then you shall not come neere that rocke to take any hurt of it. About a great halfe league to the eastwardes of the havens mouth, ly two great black rockes, the one somewhat further from the shoare then the other. When you come from the eastwards, and you will goe in close about the east point, and you keepe the southermost (that is the greatest) right on the east point, then you shall goe through betwixt the suncken rock and the point: but if you keepe the northermost (or the smallest) a little without the foresaid point, so long untill you have brought the foresaid old ruined Castle, without the innermost point, then you shall goe alongst without it, and then in the midst of the channell alongst by the easter shoare. A little past that foresaid old ruined Castle, standeth a Castle on the west side upon a point, there lieth off a showld, which must be shunned, and therefore must keepe close alongst by the easter shoare, untill you be gotten about the showld of the Castle, and then westwardes up unto the Kay of Kinsale, there you may ancker in eight or nine fathome, and ly landlockt for all windes. The towne Kinsale lieth a little to the northwardes in a bay, where it is soft oasie ground, part whereof falleth dry at lowe water.

Four leagues to the eastwardes of Kinsale, lieth the haven of Corck, betwixt both about a league to the westwardes of Corck, you shall see (sailing alongst the coast) two steep hommockes like Towers in the land, not farre one from the other: these are notable marks for to know the coast. When you are thwart of the eastermost, you may see the havens mouth of Corck, that lieth in northnorthwest; within it is wyde and broad, and goeth up into the land with a broad river. On the east side, somewhat within, is a point, where lieth off a ledge of rockes, which must be shunned. There over against on the west side, somewhat farre in, lieth another point with an old ruined Castle, there also lieth off a showld; to the northwardes of it men goe about to Corck. Within that Castle lieth a little tyde-haven in a sandy Bay. Within the haven lieth an Iland, where men doe faile round about, and at the south side thereof may ride. It is in this haven of Corck at low water, seven, eight, and ten fathome deepe.

A little without the east point standeth an old ruined Castle upon the low land, and somewhat further eastward, a square Tower in a valley. A league to the eastwardes of the havens mouth standeth a Tower upon a high point, close to the water side, with ten or twelve thatcht houses by it. Moreover, a league further east, by a smooth point, lieth a long rock growen about with greene, upon the east side of that point standeth a flat Tower. Further, it is to the eastwardes all low land, unto the point of Iochull.

Four leagues to the eastwardes of Corckhaven lieth an

Iland called Ballecotton, within it men may ride for westerly and southerly windes, in foure, five, or sixe fathome. Corck and Iochull ly eastnortheast and westsouthwest, distant seven or eight leagues.

The haven of Iochull is a bard haven, where men must goe in at high water, by the eastland it lieth in northwest and northwest and by north. The west side is a sandy strand all alongst to the Towne.

About a league south & by west from the havens mouth of Iochull, lieth a little Iland called Chappell: under it on the east side is a good road. He that commeth before Iochull at a low water, may goe under that foresaid Iland to ride there, and stay for the last quarter flood, then there is foure fathome water upon the banck. At the west point of the Havens mouth lieth a rock within it. About halfe waies to the towne standeth a Friery, before it men may ride, they may also edge over to the eastland, and then runne up the river. Within it is three, foure, and five fathome deepe. From the east side lieth a rane of rockes, at least halfe waies over in the havens mouth, a little without the rockes it is at low water no more then five or sixe foot water, but at high water it is deepe enough.

Four leagues to the eastwardes of Iochull, lieth Dongarvan haven, betwixt both lieth an out point; a little to the eastwardes of it standeth a high black Tower called Ardimore, which may bee seen well foure leagues at sea; within it is a bay, which is a good road for westerly windes in seven or eight fathome.

Dongarvan is a narrow tyde-haven, the mouth of the haven is full of rockes, and at low water it falleth dry, men must goe in there at high water, and runne in through betwixt the rockes, it lieth in northnorthwest, within it is deep enough. The towne Dongarvan lieth upon the west side of the haven. From Dongarvan to Waterford are eight leagues.

Within Dongarvan, northnorthwest landwards in, lieth the mountaine of Sleges, which men doe call the high mountaine of Dongarvan, or Cape de Quin, or Cary Quin, it sheweth it selfe with three exceeding high hommockes, farre above all other landes, thereabouts men may see it at sea, alongst a great part of the southcoast of Ireland.

When you shall have that mountaine northnorthwest from you, and faile in right with it, you shall fall right with Dongarvan.

When you shall have it north of you, and faile in right with it, then you shall fall with Iochull; being northnortheast, then you shall fall with Corck, but when it shall be northwest, and so runne in, you shall fall with Waterford.

Of the tydes, and course of the streames.

ON these south coastes of Ireland an eastnortheast and westsouthwest moone maketh high water, within the havens a point later, to wit, an east and by north, and west and by south moone: but in the offing a seaboard a southwest and northeast moone.

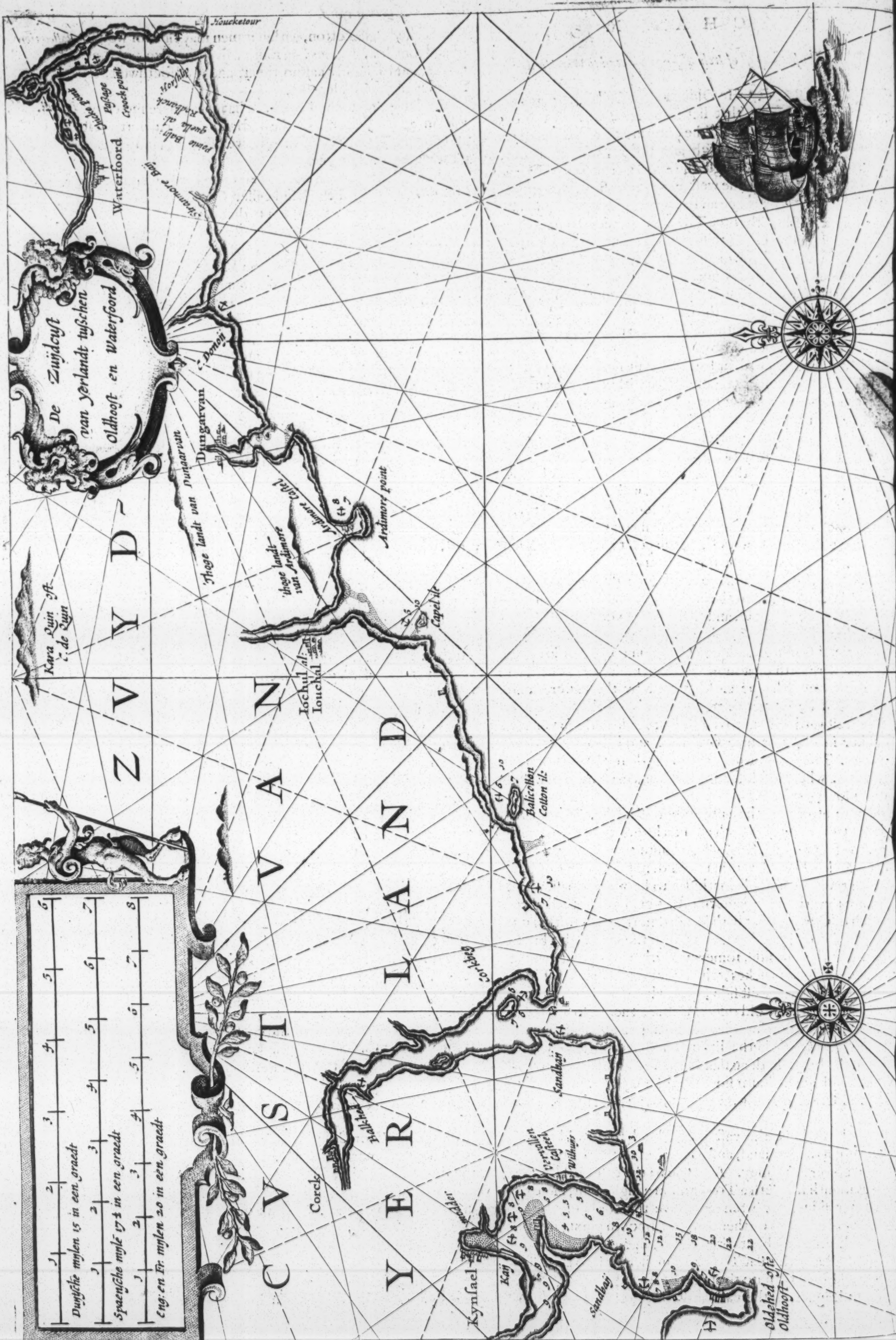
Betwixt C. Cleare, alongst the coast before Waterford, unto the point of Carnaroort, the flood falleth alongst the coast eastnortheast, and the ebbe westsouthwest.

Courses and Distances.

FROM Oldhead, or C. de Velho, to the haven of Kinsale, is the course north and by east 2 leagues.
From Oldhead, or C. de Velho to Corck n.e. & by e. 5 leag.
From Corck to Waterford the coast lieth most e. n. e.
From C. de Velho to the Lands end of England southeast 45 leagues.

Heights.

Cape de Velho, or Oldhead lieth in 51 degr. 28 min.



How these lands doe shew themselves at sea.



Thus sheweth Oldhead when it is westsouthwest a halfe league from you, then may you see the haven of Kinsale open.



When Oldhead is west two leagues from you, it sheweth in this forme.



The land a little to the eastwards of Kinsale sheweth thus.



The land to the eastwards of Cork towards Iochull sheweth in this forme.



Old ruined houses.

A



The Rock berwixt Iochull and Cork.

When you are to the eastwardes of Cork, not farre from land, and that the harbour's mouth doth begin to open, then sheweth the land as is described in these two figures, at the A A belonging one to the other, being neere the land, it seemeth to be high land, but a far off (when you can see the high inner land, within Iochull, over the Cliff land) it seemeth to be but low.

Inner land farre within the land.

Inner land north and by west.



Rock.

Mouth of Iochull.

These two figures belong at the B B one to the other.

Dongarvan.



When you are before Iochull, or thereabouts, (two or three leagues from land) so that the high Mountaine of Cape Quin be north and by west from you, then sheweth the land thus, the double inner land is very high blew land, you may see it in cleare weather twelve or thirteene leagues off.



Cork.

Rock.

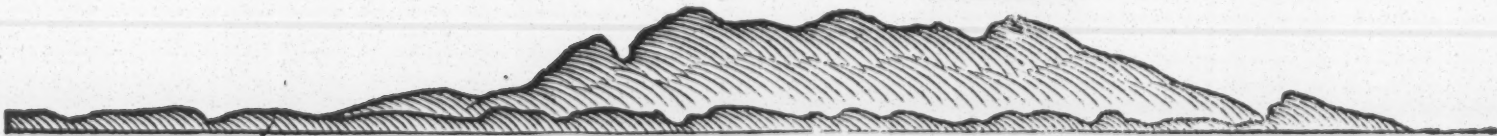
Iochull.

The high land of Dongarvan.



These two figures belong at the C C one to the other, and is the forme of the land berwixt Cork and Iochull.

Northnorthwest.



The high land of Dongarvan sheweth thus being northnorthwest from you.



Thus sheweth the high land of Dongarvan when the westermost end of it is northwest from you.

The end of the third Booke.

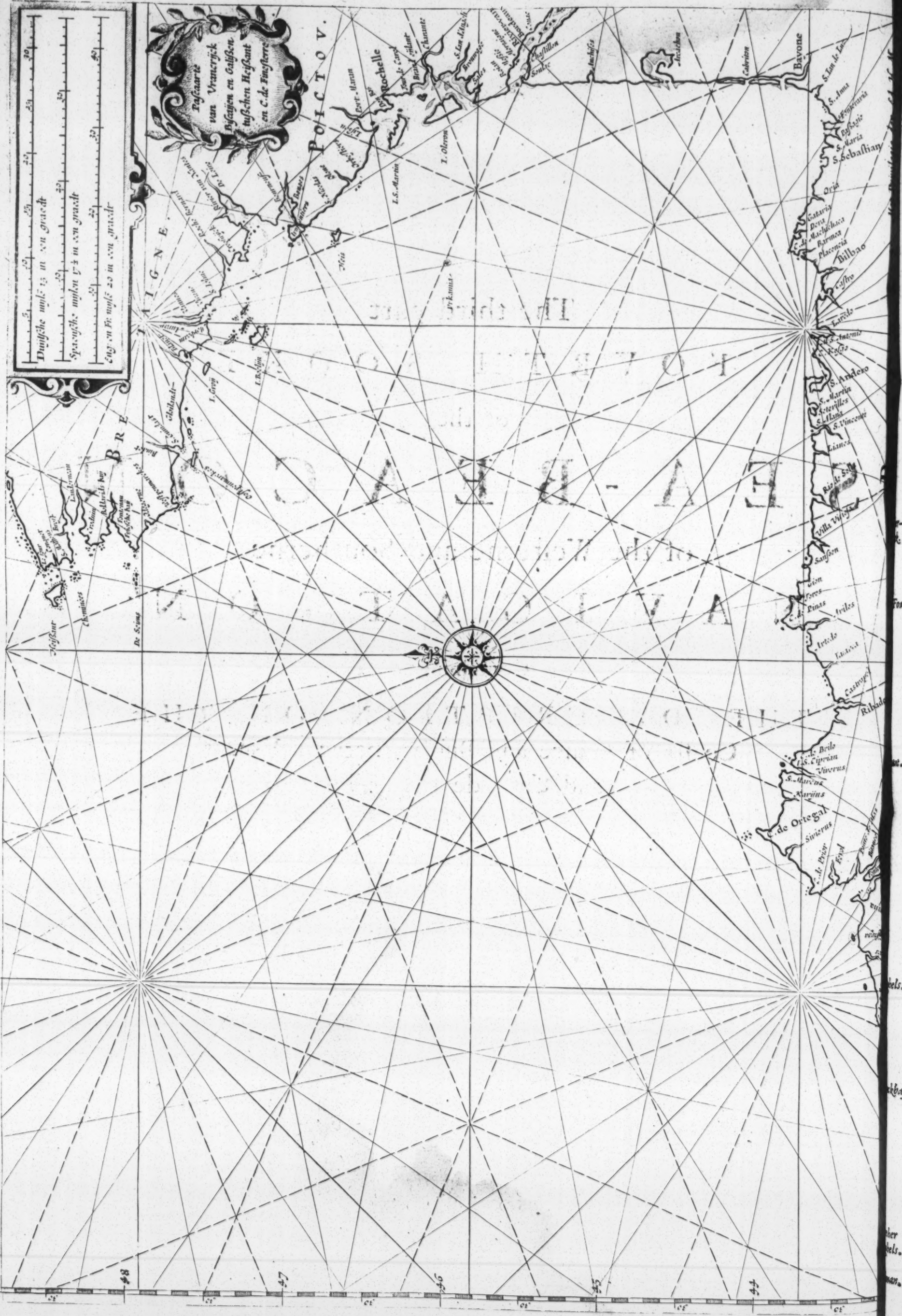
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The third part
FOURTH BOOKE
of the
SEA - BEACON
of the Westerne and Southerne
NAVIGATION,
Containing
THE DESCRIPTION OF THE
Coasts of France and Biscay, betwixt Vshant
and Cape de Ortegall.



De Kaarte
van Vranerick
tusschen en Gelfen
en C. de Fuchstere

POICTOV.

Duysche milt 15 in een graet
Spaensche milt 17 1/2 in een graet
Eng. en Fr. milt 20 in een graet

THE FOURTH BOOKE of the WESTERNE NAVIGATION,

Contayning the Description of the Coastes of France and Biscay,
betwixt Vshant and Cape de Ortegal.

C H A P. I.

*Of the Coastes and Ilands at the outermost west end
of Britaigne.*



From the Iland Ile de Bas unto the Fourné, (the outermost or the westermost end of the maine land of Brittainne) the course is westsouthwest, and west and by south thirteene leagues. About halfe waies betwixt them both lieth Obberwrack, or Abberwrack.

About a league northwest without the rocks of Obberwrack or Abberwrack lieth a rane of rockes under water. They that by night will faile or turne to windwardes from the Fourné or towards the Fourné, let them not come thereabouts neerer the land then in 45 fathome.

A league to the eastwards of the Fourné, and all alongst the coast even unto the Fourné, ly many long black ragged rockes, at many places to looke to like villages, these are called the Ovens, within them on the maine land (which is not very high) men shall see (sailing alongst by them) many white sandbayes, & here & there some little houses, whereby the foresaid land thereabouts is very good to be knowne.

The Fourné and Vshant ly westsouthwest and eastnorth-east distant two great leagues. Vshant sheweth it selfe at sea at the south end low, and at the north end going up sloping, upon the middest of it standeth a little flat tower, by which markes it is good to be knowne.

For to faile through within Vshant, the course from the Fourné to S. Mathews point is southsoutheast foure leagues. At the point of the Fourné ly two rowes of little rockes, & to the southwards of them alongst the Coast ly three other heapes of rockes, each of them about an English mile one from the other: runne alongst within two cables lengths by the foresaid rockes at the point, which is much neerer the east side, or the maine land, then Vshant, for to shun the norther Haghels, which doe ly betwixt Vshant & the foresaid rockes or Ovens, or els if you keepe S. Mathews Abbey in the low valley to the eastwardes of Conquets oort, and faile so right with it, then you runne through neereft the east side, and in the middest of the channell, betwixt the fowle ground and the rocks, untill you come thwart of Blanckbay, or neere Conquets oort; there standeth a mill upon the high land, alone, when it is east from you, then the souther Haghels ly west and by north from you, and the norther Haghels northwest and by west: there is also a high flat peece of land, a little to the eastwardes of the Abbey of S. Mathews, the top of it being even & plaine, like unto a long plaine house, when that commeth even without the point Conquets oort, and the foresaid mill be east and by south, and eastsoutheast from you, then ly the north Haghels west and by south from you, so that when the foresaid mill is east thwart from you, then are also the Haghels west thwart from you. When Halmap or Hayman-hill (that is a high rock lying at the east end of Vshant) commeth over the n. w. end of the northermost Mollens by the French called *Cheminees*, then are you also thwart of the Haghels.

He that must turne to windwardes from the Fourné towards Conquet, or S. Mathews point, let him make use of these markes: In the point of Conquet-haven, or Conquets oort, are two valleys the one great, that is the westermost, and one little, that is the eastermost, in manner as is here portrayed:



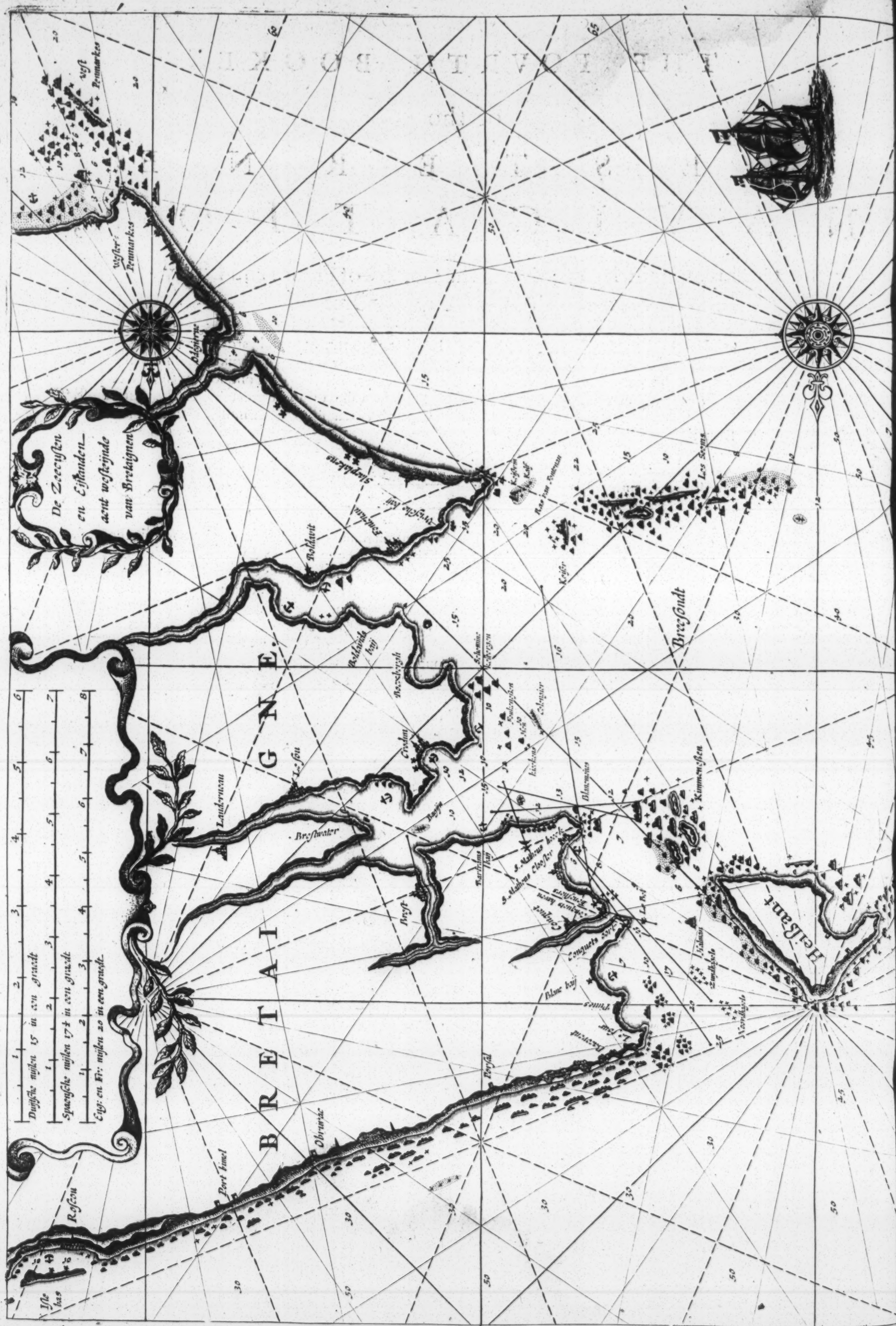
When you runne over to the eastwards towards the land, and that the Abbey of S. Mathews commeth a capstone barres length to the eastwards of the smallest valley, according as is shewed in this figure, then it is time to cast about: and when you runne over to the westwards towards Vshant, and that the foresaid Abbey of S. Mathews commeth a little without the point of Conquet haven, you must also cast about, for when the foresaid Abbey commeth two ships lengths without the foresaid point, then are you close by the Haghels. The Norther and the Souther Haghels ly about a shot of a cast peece distant one from the other.

Two or three Cables lengths thwart from the point of Conquet haven, or Conquets oort to seawards, lieth a funcken rock, which with a spring tyde commeth above water, called the Vintner, by the French *le Bel*. For to avoid it comming from the northwards, or from the Fourné, and being come upon the foresaid marks (of S. Mathews Abby in the great valley of Conquets oort) unto close by Conquets oort, then runne close about by it, alongst within a cables length of the point, or keepe the Abbey of S. Mathews even without to the point of Conquet oort, and so close about it, within a cables length, as before is said, and then you shall leave the Vintner a Cables length or two on the starboard side of you, and can take no hurt of it.

When the little Church upon the point of Conquets oort is east from you, then is the Vintner west right thwart from you, or els when that the Souther houses of Conquet, begin to come without, or to the point of Conquet, then you have also the Vintner upon your side, west and west and by south from you, a little shot of a cast peece.

If you faile into Conquet haven, then runne about the point within a cables length, as is before said, untill you see the haven open, then you come against the Fenestiers, which are rocks that ly off about a cables length from the east land of Conquet haven under water: For to avoid them, runne alongst by the norther shoare, untill you come within the haven. Betwixt the Fenestiers and the blanck Moines (that are rocks by S. Mathews point) is a good road under the Abbey of S. Mathews as well for them that are bound to the northwards as to the southwards. If you will goe into this road comming from Conquets oort, then run right with the blanck Moines, untill that the Abbey of S. Mathews bee eastsoutheast from you, faile then towards it untill you come before the Abbey, and ancker there in fixe or seven fathome.

About a league to the eastwards of S. Mathews point, towards Brest, lieth a funcken rock, about halfe a shot of a



cast peece from the north shoare. If you will saile into Brestwater, then goe from S. Mathewes point away east and by south, and eastsoutheast, and keep the north end of the Southermost Mollens, without S. Mathewes point, so long untill that the mill upon the northland come to the northwards of the trees, then you saile alongst to the southwards of the foresaid rock, and so doing, you can take no hurt of it; but if you bring the south end of the Mollens neerer to S. Mathewes point, you shall not faile to saile upon it.

For to saile to the northwardes of the foresaid rock, you must runne from S. Mathewes point alongst by the North land, and keepe the southermost Mollens hidden behind the great rock that lieth off from S. Mathewes point, and saile then right with the west point of Bartrams bay, untill that the foresaid mill standing upon the north land, commeth to be northwest and by north from you, and the trees stand northnorthwest from you, then shall you be past the foresaid rock; but to runne alongst to the southwardes of it, is best and broadest. For to saile forth alongst to Brest (being past the foresaid rock) you must runne forth within two Cables lengths alongst by the north shoare. A little within the east point of Croidan, or Claesdownes, lieth a rane of rockes, about the middest of the channell in the mouth of Brestwater, which at low water ly above water, and at high water are under water, called the Bagine, you may runne alongst on both sides of it, but to the northwards of it, is best; when the south point of Brestwater commeth over the point of Croidan, then are you thwart of the foresaid Bagyn, which lieth about two cables lengths from the north shoare, runne alongst to the northwards of it: when then Brest commeth without the point, saile then so right to it, you must anker there with an anker to seawards in eight or nine fathome, and with a cable a shoare fast on a tree; When you come within the Bagyn, you may edge up to the eastwards, or to the southwards before the river of Landerneau or Lefou, and anker there under the south land, in ten, twelve, or thirteene fathome, before the little towne old Croidan. Brestwater, or the river of Landerneau, lieth in most eastnortheast, and it is Pilotes water, he that is bound in there, may take a Pilot to bring him in where he desireth to bee: It floweth there with an ordinary tyde, three fathom up and downe, a southwest and by west, and northeast and by east moone maketh there full sea.

If you come to anker within Brest, you must pay for ankeridge ten sous, & for it you shall get a ticket of freedom. If it shold happen that you shold loose your ship upon Britaigne, you might therewith challenge your goods, els they are unfree.

Bartrams bay lieth about two leagues to the eastwards of S. Mathewes point, a little league past the foresaid suncken rock, there is good ankering for a north, and northeast wind, in ten and eleven fathome.

Over against Bartrams bay lieth Croidan or Claesdowns from S. Mathewes point, southeast distant about three leagues, it is a great bay. For to saile from S. Mathewes point to Croidan, you must keepe the southermost Mullens even without the Blank moines (that are the rocks without S. Mathewes point) and go away east and by south, and eastsoutheast untill you come before the bay, and may see open into it, then you shall see a chappell, or little Church stand upon a chindle, run in right with it, and anker there abouts, in six, seven, eight, nine, or ten fathom, there is the best road.

The Mullens are the rocks which ly there to the southwards of Vshant, and to the westwards from S. Mathewes point. Betwixt them and Vshant lieth a channell northeast and southwest through, which is indifferent large, and broad, and deepe enough, there remaineth at low water, fixe and seven fathome water. Hee that commeth from the northwards, and cannot saile a wether of Vshant and the Mullens, by reason of the flood, may runne through here, or he that commeth out of the sea, & with northerly winds, cannot saile a wether of Vshant, may with a flood runne through here, and so further his voyage, when men runne through here, either in or out, and keepe the middle of the channell betwixt both lands, they can take no hurt.

From S. Mathewes point to the Race of Fontenay, or the Keyser and Lavender, the course is south and by east five leagues, betwixt them both ly divers rocks, whereof men must take good heed, as the Hen with the Chickens, the Collier, the Falconers, Scheminckelbroughs, & other more. The Hen with the Chickens, and the middlemost Falconer or Foukenisse, ly from S. Mathewes point s. e. and by east distant a league & halfe, but the Collier lieth from S. Mathewes point southsoutheast also a league & a halfe.

The Falconers or Foukenessen, ly from the west point of Croidan about westsouthwest an English mile. The innermost or southermost Falconer lieth from the northermost, southsoutheast about a halfe league, or two shots of a cast peece, and from Croidan southwest and by south, and is covered at high water. Northnortheast a cables length from it, lieth another suncken rock, which at low water, may even be seen. To the westwardes of the northermost Falconer lieth also a suncken rock which at low water may even be seen.

The Hen lieth from the Falconers westsouthwest about two cables lengths; or a shot of a cast peece, it is a round sharpe rock, it is round about it deepe and cleane, in six and seven fathome. The Chickens are two sharp little rockes, which at low water may even be scene, and ly about the shot of a Base northnorthwest from the Hen, and west from the northermost Falconer.

The Scheminckelbroughs ly to the southwardes of the Falconers, men may runne through betwixt them in ten fathome to the point of Croidon, there is good road and anker ground.

If you will saile from S. Mathewes point to the Race of Fontenay, you must go away south and by east, and bring the mill of Fenestiers, which standeth upon the east point of Conquet haven, over the point of S. Mathewes, a little to the westwardes of the Abbey, and keepe them so standing so long as you can see them, and you shall not come too neere the foresaid rockes, to take any hurt of them. When as then you come to the Keyser and Keyserinne, first give the Keyser a birch, because of some suncken rockes which ly off from the east side of it under water. From the south-west side of the Lavender runneth off a fowle ledge of rocks called the Calfe, there the tyde falleth very strong over it, with very great rippeling. This channell of the Race of Fontenay, lieth through betwixt the Keyser and Lavender southsouthwest and northnortheast. He that will saile through here, must bee very carefull to cast his tydes well, for it runneth most thwart over this Race, so that with a southwest wind, and an outfall or ebbe, and also with calmes, it is very dangerous to come into this Race.

A little to the southwardes of the Keyser, lieth the east end of the Seames, and ly from thence at least three or four leagues westnorthwest into sea. A great league northwest from the west point of the Seames, lieth a suncken rock, whereof men must take heed.

And westsouthwest about two leagues from the Seames, lieth a row of rocks, like a bancke, whereupon it is not deeper then seven fathome, but betwixt the rocks and the Seames it is fifty fathome deepe.

Betwixt the Seames and Vshant the Broad Sound lieth in eastnortheast to S. Mathewes point, and from S. Mathewes point westsouthwest five leagues into sea.

To the eastwards of Fontenay, or the Lavender, lieth the Frieze Bay, there men may anker for a southeast and east winds, in good anker ground.

To the eastwardes of the Frieze Bay lieth Boldavids Bay, a broad deepe sound, lying into the land eastnortheast. At the east side of that haven, ly two little Ilands, or rockes, where men may anker round about them, and ly sheltred for all windes.

From the Race of Fontenay to the Pennes the course is southeast about nine leagues, betwixt them both lieth Old yarne, a good haven; about five leagues eastsoutheast from Fontenay, thwart before the entry of it, lieth a banck, where men may runne about it on both sides in fixe fathome. The south point of this haven is flat, therefore run in alongst

Henne.
Chickens.

Falconers.
The sou-
thermost
Falconer.

The Hen.
Chickens.

Scheminckelbroughs.

Keyser.
Lavender.
Race of
Fontenay.

Seames.

Broad
Sound.

Frieze Bay.

Boldavids
Bay.

Old yarne.

alongst by the north point, there is at low water, not lesse then three fathome depth. From Oldyarne to the Pennes it is southeast and by south.

If you will ancker before Port Kapstand, you must ancker in twelve or thirteene fathome, before the village that standeth upon the high land, about halfe waies betwixt the point of the Race & the great sand-bay of Oldyarne, where the little sharpe Tower doth stand, the point of the race shall then ly from you about northnorthwest, and you shall then ly a great halfe league from the land, further off from the shoare it is rocky and fowle ground, as some say. There have some neverthelesse come to ancker there by night three or foure leagues from the shoare in 25 fathome, but have not received any hurt neither of Cables nor anckers.

The west end of the Seames, and the Pennes, ly southeast somewhat southerly, and northwest somewhat northerly distant about thirteene leagues.

Sheetes. The knowledge of the land betwixt Fontenay and Oldyarne, are two round hills which men doe call the Sheetes, or Slaeplakens, to the westwardes of them stand two milles. It is a very ragged point, and by these foresaid markes very good to be knowne. Men may see them without the Seames in five and fifty fathome.

From Oldyarne to the Pennes lieth the coast southeast and by south five leagues.

of the tides and course of the streames.

AT Abberwrack an eastnortheast and westsouthwest moone maketh full sea.

Without Vshant a westsouthwest & eastnortheast moone, and within the Trade a southwest and by west moone maketh full sea.

At S. Mathewes point, a southwest and northeast moone maketh the highest water.

In the Broad Sound, betwixt Vshant and the Seames a westsouthwest and eastnortheast moone maketh the highest water: the flood falleth very strong upon Vshant, and to the southwardes of it through the Mullens, thwart over the Trade, towards the Backovens. Likewise in through the Broad Sound unto Brest. Also alongst by S. Mathewes point towards the Fourne, or Backovens with very great rippling. He that commeth sailing about Vshant, must reckon thereupon.

In the Race of Fontenay a southwest and by south, and northeast and by north moone maketh full sea. The flood falleth very strong through betwixt the Keyser, somewhat thwart over towards the Lavender, with very great rippling over the Calfe, (that is the ledge of rocks which lieth off from the Lavender) and from thence forth north and north and by west inwardes to S. Mathewes point: with calmes men must take very good heed not to be miscarried away with the current. With stormy weather out of the north or south, it is not without danger to come in this channell, especially with an ebbe or out fall.

Of the depths about these places, and in what depths men may see the land.

THwart of Abberwrack five leagues from the land, it is deepe 50 and 55 fathome.

The Backovens, or the land of the Fourne men may see in fifty fathome.

Vshant being about south from you, you may see it in fifty fathome.

Southwest from Vshant five or sixe leagues off it is deepe five and seventy fathome, and then you may see the land from the poop.

In the broad sound it is deepe foure and fifty fathome.

A little without the Seames, about a league, it is deepe fifty fathome.

Men may see the Seames and the Sheete, or Slaeplaken, in 60 and 65 fathome.

Betwixt Vshant and the Seames in the fareway it is deepe five and fifty fathome.

How these lands doe lie one from the other, and from other lands.

From Ile de Bas to the Fourne, westsouthwest 16 leag.
From the Fourne to S. Mathewes point southsoutheast and southeast and by south 4 leagues.
From S. Mathewes point to Croidon, or Claesdowne east-southeast 3 leagues.
From S. Mathewes point to the Race of Fontenay, or the Keyser, south and by east 5 leagues.

From Vshant to Portland northeast 53 leagues.
From Vshant to the Steart northeast & by n. 40 leag.
From Vshant to the Lizart north 29 leagues.
From Vshant to Silly northwest and by north 37 leagues.
From Vshant to C. Cleare in Ireland northwest 84 leagues.
From Vshant to the Iland of S. Michiels southwest and by west 360 leagues.

From Vshant to the C. Finisterre southsouthwest westerly 123 leagues.

From Vshant to Cifarga southsouthwest 77 leagues.

From Vshant to Cape Prior southsouthwest 106 leagues.

From Vshant to C. de Pinas south 97 leagues.

From Vshant to Laredo southsoutheast 113 leagues.

When men saile away south & by east from Vshant, then they runne a little without the Seames.

From the Race of Fontenay to the Pens southeast 9 leag.

From Fontenay to Oldyarne eastsoutheast 5 leagues.

From Oldyarne to the Pennes southeast & by south 5 leag.

From the west end of the Seames to the Pennes eastsoutheast somewhat southerly 13 leagues.

From the Seames to the Band or Craghe of Oleron south-east and by east 112 leagues.

From the Seames to Bayone in France southeast 112 leag.

From the Seames to S. Sebastians southeast and by south 112 leagues.

From the Seames to Bilbaw f.f.e. easterly 101 leagues.

From the Seames to S. Andero southsoutheast 69 leagues.

From the Seames to C. de Pinas, or Tores, south 88 leag.

From the Seames to Ribadeus south & by west 93 leagues.

From the Seames to Cape de Ortegal southsouthwest southerly 90 leagues.

From the Seames to C. Finisterre southwest and by south southerly 112 leagues.

From the Seames to Silly northnorthwest 45 leagues.

Heights.

Vshant lieth in
The Seames ly in

49 degr. 30 min.
48 degr. 5 min.

How these lands doe shew themselves at sea.

Fontenay.

Oldyearne.

The Pennes.



Thus shew the Sheetes, or Slaeplakens with the Pennes, as you saile alongst by them, and that they are about foure leagues thwart from you.

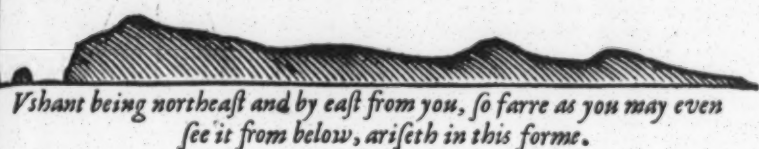
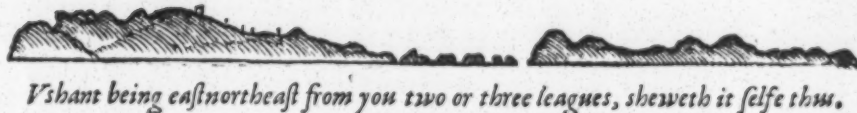
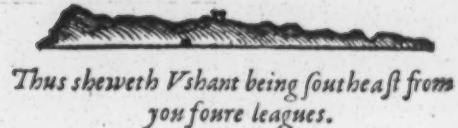
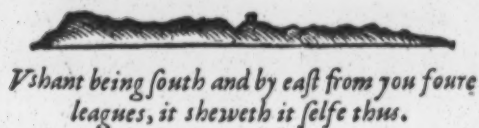


When Vshant is south and by west from you foure leagues, it sheweth it selfe in this forme.



Vshant being south and by east from you three leagues, sheweth it selfe in this forme.

Vshant



C H A P. I I.

The Coastis and Ilands betwixt the Pennes and S. Iolme,
or the river of Vannes.



He Pennes are very good to be knowne, for him that hath seene them once: upon the southeast end standeth a thick flat tower; a little to the westwardes of it standeth a sharpe tower, and somewhat more to the eastwards against the high land, standeth a Village to see to like a Castle, upon the east side thereof standeth a flat tower, and there close to the land ly two great rocks.

The Pennes ly off from the maine land, southeast two leagues into sea. For to saile in there, you must come in there from the eastwardes, and run alongst by the strand of the maine land, leaving all the rocks on the larboard side, untill that you come to a great rock which you must leave on the starboard side, and runne about to the southwardes of it; being past it, edge within it up towards the northwest and ancker there a little within, in three fathome at low water, lying there, you can see no sea, but at high water the sea commeth very much tumbling in through the rocks: You may goe away from thence at high water southeast through the rockes into sea, but you must take very good heed, because it is there full of rockes, whereof some are above water, and some under water. Without the foresaid great rock in the comming in of this haven, it is at least ten fathome deep; so that for need men might well save a great ship there.

From the Pennes to the Glannons or Glenant, the course is eastsoutheast with that course you shall runne alongst to the southwardes of them. Within the Glannons lieth a haven called Binder, at the east point of that haven it is full of rockes. For to saile in there, you must take heed unto these markes; there stand two mills farre within the land, bring the eastermost of the two over a little castle that standeth upon a point within the haven, and runne in keeping them so northeast and northeast and by east in, and then you cannot take hurt on neither of both shoares, and being come within the haven, ancker before the towne.

A league southwest from Gloyland or Glenant, by the Dutchmen called the Easter-Penmarks, lieth a great rock

under water, but is good to be espied, in regard the sea alwaies braketh upon it; as well within as without this rock, it is forty fathome deepe.

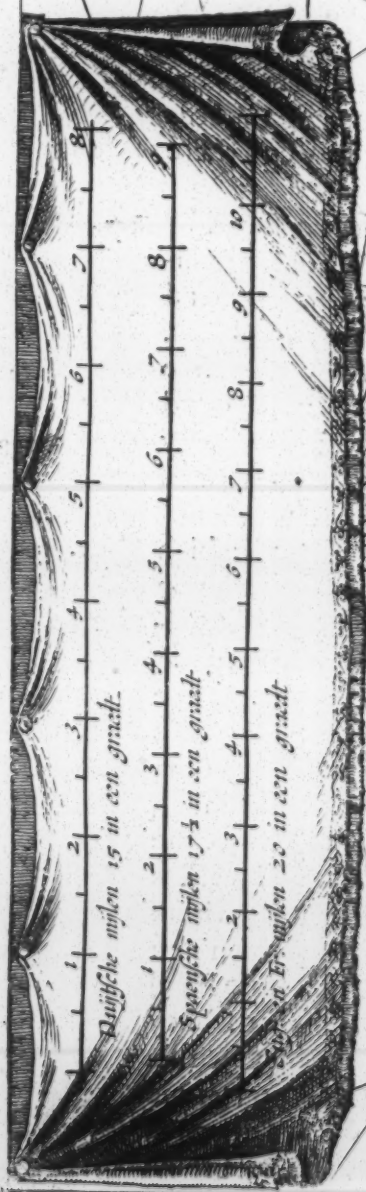
When you come off from the Pennes, with an eastsouth-east course, you shall runne alongst farre enough to the southwardes of it. About two leagues to the eastwardes of Glenant, ly the Ilands of Muttons, by the French called *Muttons Isles aux Moutons*, you may saile through betwixt them and the maine land, unto Groy, or Blauet, also you may ancker within them in ten or twelve fathome, betwixt the land and the foresaid Ilands, which are cleane upon the north side.

Betwixt the Iland Mutton and Glenant, lieth a rock, for to avoid it (for them which will saile through there betwixt them) they must leave one third part of the channell towards Glenant, and the other two third parts towards Mutton, and then they may boldly runne through there without feare.

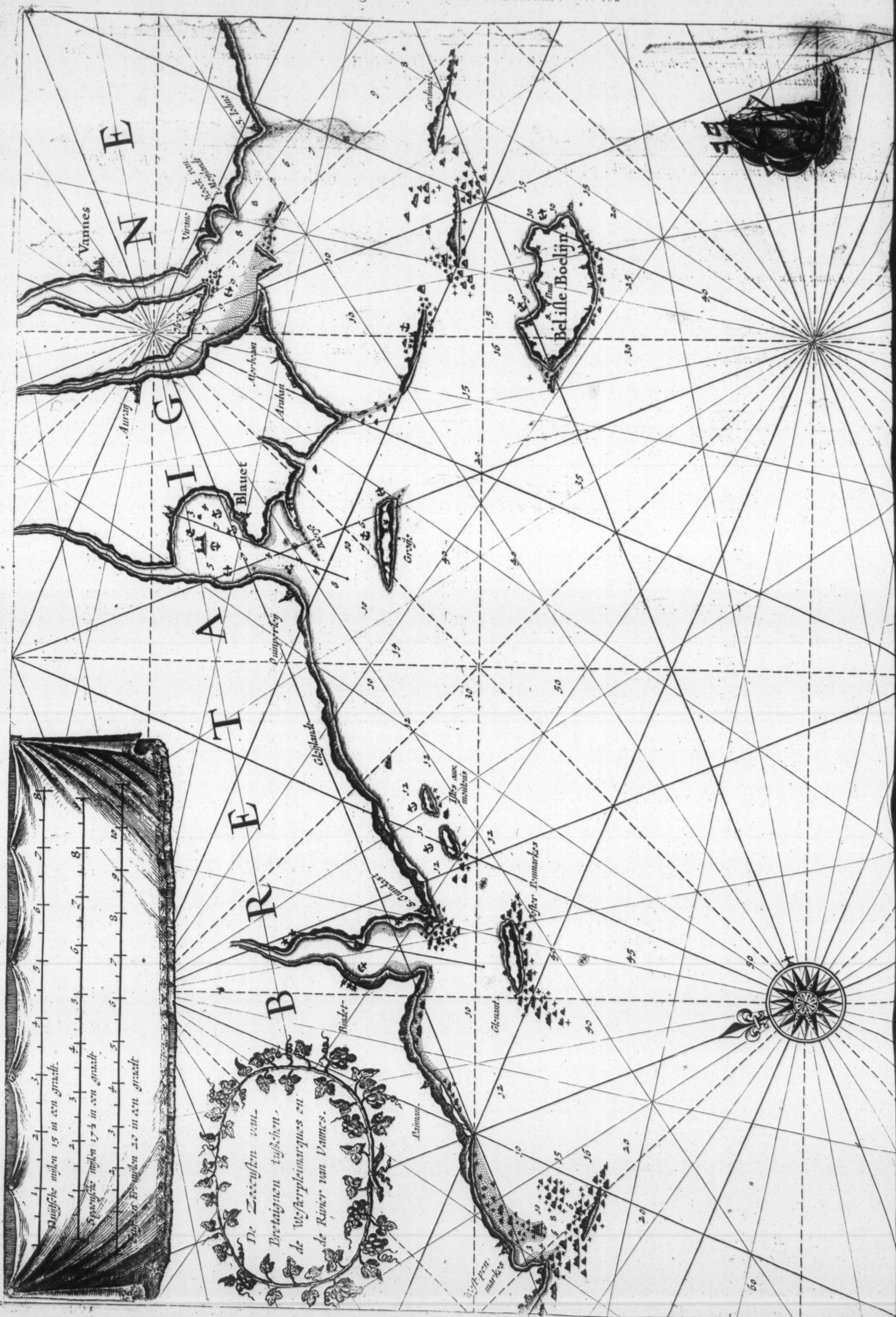
From Mutton to the Iland Groy the course is east and by south, upon the outer side of Groy, stand three or four miles, the east end of it goeth steepe downe, and the west end sloping and flat downe, thereby it is good to be knowne. Vnder Groy is good anckering for a southwest wind in sixe or seven fathome: under the northeast point also is a good road for a westsouthwest and northwest wind, there is very good ancker ground. At the southwest end runneth off a fowle ledge, whereof men must take good heed.

Within the Iland Groy lieth the haven of Blauet, which lieth in about northeast in foure and five fathome. Vpon the west side of this haven standeth a high sharpe tower called Quimperley, from the east point runneth off a great ledge of rockes, called the Baers, within it on the east side of the entry of the haven ly two suncken rockes, also on the west side a rock with a hole, which at halfe ebbe is uncovered, whereof men must take very good heed in the comming in; men runne in alongst by the westland, for to eschew the foresaid suncken rocke and fowle grounds. The markes for to saile in there are these, there lieth a little Iland within in the middelt of the haven, which you may see when you are without the haven. To the eastwardes of that little Iland upon the maine land, standeth an Abbey, bring that Abbey right to the east point of the haven, which lieth within the Baers, and saile right in with it, untill you come thwart of the east point within the Baers, and runne in about by it: being within it, there it is wide and broad,

N you



De Zeeuſten van
Bretaignen tuſſchen
de Weſterpleinmarques en
de Rivier van Vannes.



you may ancker there before the foresaid little Iland in five or sixe fathome, there it is at low water three or foure fathome deep, or els men commonly runne in about by the point untill they come in the oaze.

From the Pennes unto Bell-Ile, the course is eastsoutheast one and twenty leagues, but from Groy to Bell-Ile it is southsoutheast five leagues. Bell-Ile hath at the northwest end a steepe point lying out with a great saddle, thereabouts stand also some little houses, and the end goeth very steepe downe.

When as Bell-Ile lieth northnortheast from you, the west end sheweth it selfe in three parts: the westermost whereof is a great rocke, which floweth at a very high water almost under, at the east end there divideth it selfe off also a great rock: by these foresaid marks it is indifferent well to be knowne, men may see Bell-Ile out of the sea in five and fifty fathome. At the south side ly off many rocks and little Ilands.

If you will seek a road under Bell-Ile, then you must give the northwest end a good birth, off from it lieth a suncken rock under water, a good waies from the land: being come within it, saile then within two Cables lengths alongst by the land, within a Base shot about by the north point, untill you come before the village with the little sharpe tower called Saint Pauls, there standeth a castle upon the point to the westwards of the foresaid little tower, ancker within that point in nine or ten fathome, there ye shall ly landlockt for a south, southwest and northwest wind. If it blow more northerly, you must shift, and runne before the east end (which is about a halfe league broad) and ancker there in ten or eleven fathome. This Iland lieth about southeast & northwest, according as the wind bloweth men doe shift there from one road to another, it is there every where good riding.

Within the Iland Bell-Ile, to wit, betwixt Bell-Ile and the maine land, ly many little Ilands, where at divers places men may saile through to the rivers of Vannes, or Morbeam, Roche Barnard, and the river of Nantes, called the Loire. Of these Ilands are three the principall, the eastermost is called the Cardinall, the east point whereof, and the east point of Bell-Ile ly one from the other directly east and by north, and west and by south about foure leagues. The middlemost is called by some also the Cardinall, or els together with the eastermost the Cardinalls. This hath a good haven on the north side, going in by a great rock. From the northwest point of the northermost or westermost, runneth a sandy strand unto the maine land, against the point betwixt Blavet & Morbeam, so that men cannot saile there betwixt that and the maine, but at high water it is most covered, and at low water it lieth most dry, at low water men may go over there on foot from the Iland to the maine land.

He that commeth from the west, and is bound to Morbeam, Roche Barnard, or other places thereabouts, must runne to the southwardes of it, and if he will not saile about to the southwardes of Bell-Ile, hee may saile through betwixt the northermost and the middlemost Iland, and also he may saile through betwixt Bell-Ile & the foresaid Ilands, about to the eastwards of the Cardinall. The channell there betwixt them both, is about a league broad and cleane, it lieth through eastsoutheast, and southeast and by east, men may runne alongst by the Cardinalls either by night or by day, in eight, nine and ten fathom, all cleane sandy ground.

For to saile through betwixt the westermost (which is fast at the north end with the strand to the maine land) and the middlemost Iland, the course is from the northwest end of Bell-Ile eastnortheast. A little from the east end of the foresaid westermost Iland, lieth a great round rock which you must leave on the larboard side, and run alongst by it, within two or three Cables lengths, and then you shall leave on the starboard side to seawardes of you a great many rocks, some above and some under water, which ly towards the other Ilands, which you must give a greater birth to, then to the foresaid great rock. From this foresaid channell to the river of Morbeam, or S. Iolme, the course is

northeast or northeast and by east, or els if you runne about to the eastwards of the Cardinall, and are bound to Morbeam, then goe away from the east point of the Cardinall, first northwest, and northnorthwest, and you shall have then in that fareway eight and nine fathome depth, goe then by little and little more northerly right with the point, which lieth to the westwards of S. Iolme, there runneth off the said point of S. Iolme, a ledge or riffe of rocks almost a halfe league into sea, which you must leave on the starboard side, and runne in to the westwards of it, betwixt the ledge and a little Iland which lieth eastsoutheast from the west point, & is fast to the foresaid west point, with rocks and fowle ground, so that you cannot saile in alongst to the westwards of it, nor through betweene them: so soone as you shall be entred within the foresaid little Iland, you must give the west point a birth, and runne in alongst by the east shoare, which is flat, and lieth from the tower of S. Iolme to the river of Vannes northwest and southeast, but you must be sure to reckon your tide well in this channell, for it runneth in and out the river of Vannes so strong, that you cannot saile in with an ebbe, although it blow a storm, likewise doth it to the contrary with the flood, therefore you must saile in there with a still water. At the middle point where the river doth divide it selfe in two (whereof the one runneth to Vannes, and the other to Avray) ly many rocks, the most part under water, which you leave on the starboard side when you are bound to Morbeam or Avray, and on the larboard side when you are bound to Vannes; when you are come so farre within, that the Tower of Morbeam is west from you, ancker there in the middest of the haven, in nine fathome, and then shall Avray the innermost little Tower ly northnorthwest from you, and the other little tower north and by east, but the point of Mayland eastsoutheast. The wester shoare thwart of it is very steepe, but oasie and soft, you can take no hurt of it, although you failed right against it.

The East point of the Cardinall, and the entring of the haven of Morbeam ly northnorthwest and southsoutheast one from the other.

Of the tides and course of the streames.

ON these coasts of Britaigne, & the Ilands thereabouts, a southwest and northeast moone maketh the highest water: but within in the havens, rivers, in-draughts, and bayes, a southwest and by west, and northeast and by east moone, or a point later, according as the havens or rivers doe ly deepe in the land. Men doe not reckon there any setting or running of the streames, for the flood commeth (through the swelling of the great Ocean) right against the coasts, and so runneth onely into the havens, the ebbe contrariwise goeth thwart from the shoare to seawardes, when it falleth: so that men cannot perceive any course of streames, except it be a little through, or about some points of Ilands.

Of the depths about these lands.

Thwart of the Pennes and the Glannons men may see land in five and fifty and sixty fathome.

Bell-Ile men may see from below in five and fifty, but under the top in sixty fathome.

How these lands doe lie one from the other, and from other lands.

From the Pennes to the Glannons the course is eastsoutheast 7 leagues.
From Glannons, or Gloyland, to Groy, east and west nine leagues.
From the east end of Groy to the west end of Bell-Ile, the course is southsoutheast 5 leagues.
From Glannons, or Gloyland, to Bell-Ile, southeast and by east 12 leagues.
From the northwest end of Bell-Ile to the southeast end, the course is southeast and by east 3 leagues.

From the Pennes to Bell-Ile eastsoutheast	21 leagues.	From Groy to Cape de Finisterre southwest	123 leagues.
From the east end of Bell-Ile to the east end of the Cardinal east and by north	4 leagues.	From Bell-Ile to the river of Bordeaux southeast	50 leag.
From the east point of the Cardinal; to the entring of Mor-beam northnorthwest	4 leagues.	From Bell-Ile to S. Sebastians southsoutheast southerly	80 leagues.
From the Pennes to Viverus southsouthwest	88 leagues.	From Bell-Ile to S. Andero south	73 leagues.
From the Pennes to Cifarga, f. w. & by south	104 leagues.	From Bell-Ile to Cape de Pinas, or Torres, southsouthwest	80 leagues.
From Groy to Viverus southwest and by south three and ninety leagues.		From Bell-Ile to Cape de Ortegall southwest	90 leagues.
		From Bell-Ile to Cape de Finisterre southwest	123 leagues.

How these lands doe shew themselves at sea.

Thus sheweth the land betwixt the Pennes and the Glannons, when it is northeast and by east five or sixe leagues from you. This hill is very good to bee knowne, it overtoppeth in height all the land thereabouts. The Pennes are then north-northwest from you foure or five leagues.

Thus sheweth the land of the Glannons when you saile alongst by it.

When Groy is northnortheast from you foure leagues, it sheweth thus.

The land to the eastwardes of Gloyland or Glannons sheweth thus when you saile alongst by it.

Thus ariseth Bell-Ile when the northwest end is east from you about foure leagues.

Thus sheweth the west point of Groy, when it is three or foure leagues northeast from you.

When Bell-Ile is northeast from you foure leagues, it sheweth thus.

When the northwest point of Bell-Ile is east and by north from you foure leagues, and the southeast point is east and by south, and eastsoutheast, then it sheweth thus: when as you saile towards it, and you come neerer the land then the peeces which ly off from the northwest end, at last come to be fast unto Bell-Ile.

C H A P. I I I.

Of the Coasts and Islands of Britaigne and Poictou betwixt Bell-Ile and S. Martens Island.

*Roche
Barnard.*



O the river of Roche Barnard from the east point of the Cardinal, the course is right northeast: there lieth a little Island about halfe waies betwixt the Cardinal and the foresaid river, or rather neerer the Cardinal then the river (for when men are by the river, they can but even see the foresaid little Island) men runne with the foresaid course of northeast close alongst to the westwardes of that little Island, and shall fall a little to the northwardes of the river, runne then within a Cables length alongst by the shoare, unto it, untill that the river doe open it selfe, and then saile in amiddes the channell, and give the rockes a birth that ly at the easter shoare. Being come in within the rocks, you may ancker there, or else saile on against the shoare on the starboard side, and so may save shippe and goods without ancker or cable, if there should be such need. At low water with an ordinary tyde, there is about eleven, and with a spring nine foot water; with an ordinary tyde it floweth there about a fathome, but with a spring two fathom up and downe: the entring of the river lieth in east and by south. A little to the eastwardes of the rivers mouth, lieth a great rock, which at high water is covered.

He that commeth from the river of Nantes, and is bound to Roche Barnard, and is not well acquainted there betwixt both, let him runne so farre to seawardes, towards the Cardinal (when he is to the westwardes of the Four) untill that he runne about a seaboard of that foresaid little Island (lying halfe waies betwixt the Cardinal and the river of Roche

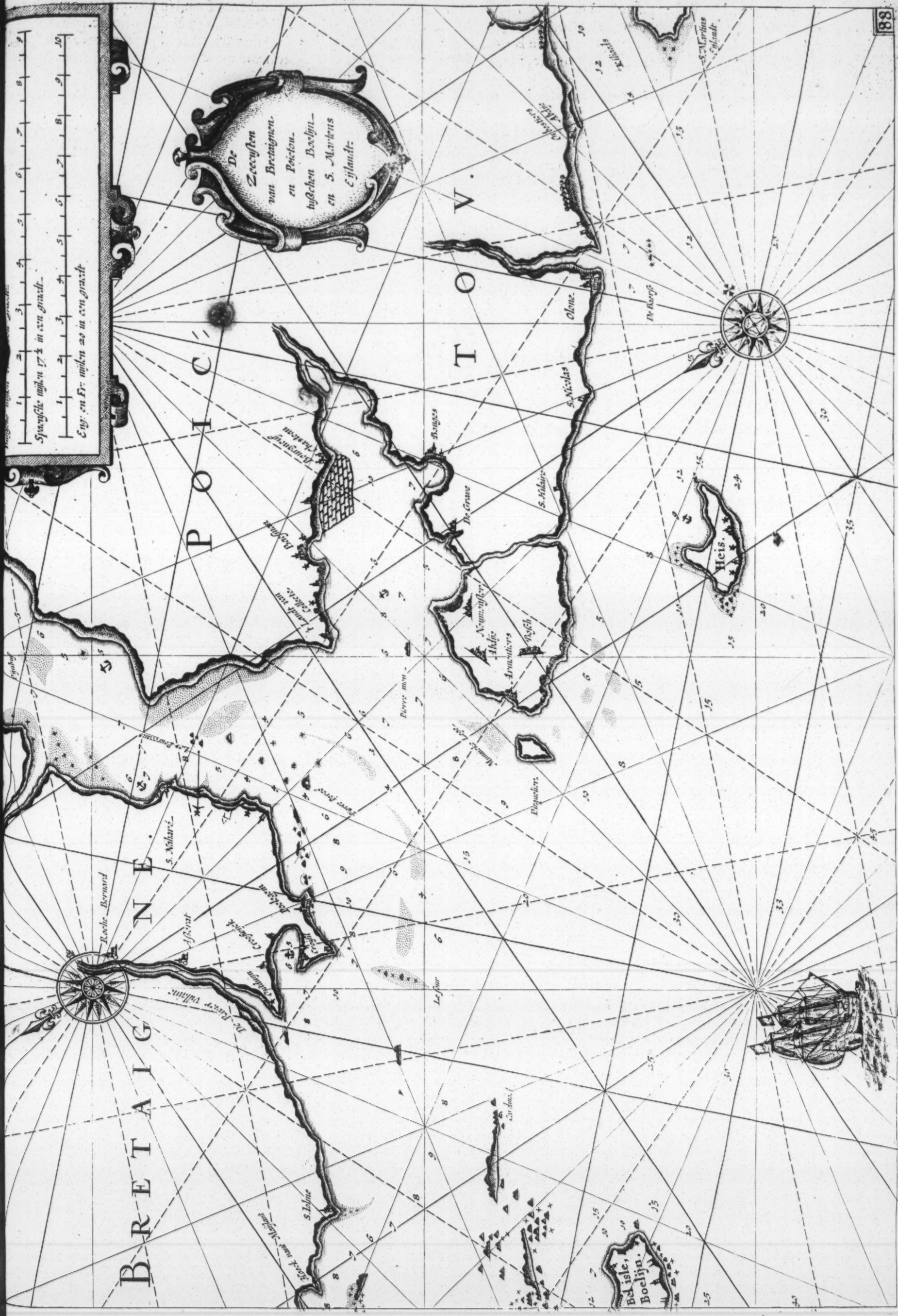
Barnard) then goeth hee surely cleare of all the fowle grounds and other dangers, men may saile close alongst by it to the westwardes, but to the eastwardes of it ly many rockes and showlds.

He that will saile alongst to the eastwardes or to the northwardes of it, must leave about two third parts of the water to the Island, and one third part towards the land, and so runne through betwixt them, but must look out well.

Betwixt the rivers of Roche Bernard and Nantes, lieth Old-downes, Caoifill, or Croswyck, and Poelgem. Cros-
wyck hath two points, within the northwest point lieth the great village of Croswyck, which hath a thick tower, and there is a great In-draught like a haven, where men may goe to ancker in five, sixe, or seven fathome: to the westwardes of it standeth also a flat church upon the high land. The land of Old-downes lieth a little to the northwardes of that Church. Poelgem is a village to the eastwardes of Cros-
wyck, with a high sharpe tower.

About two leagues from the land southwest and by south from Croswyck, and west and by north northerly from the east point of Poelgem, lieth a great banck, called the Four, which at some places falleth dry at low water, and lieth from Bell-Ile neere about east, and lieth the longest way southwest and northeast.

If you will saile from Bell-Ile to the river of Nantes, then goe away from the east end of the Cardinal, or from the eastermost rockes that ly off from the Cardinal, directly eastnortheast towards the west point of Croswyck, for to saile a wether of the foresaid Four, so long untill it begin to showld, and that the sharpe tower of Poelgem commeth against the highest of the east point of Croswyck, then you runne alongst to the northwardes of the foresaid banck, goe then eastsoutheast or according as the wind is, east and by south, & eastsoutheast on, to the rock with the hole, called Pierre-



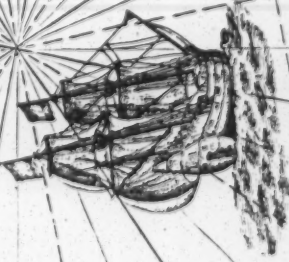
De
Zeeuyſten
van Bretagne
en Poictou-
uſchen Boeght
en S. Martens
Eijlandt

Schaal: miſen 17 1/2 in een graet.
Eng: en Fr: miſen 20 in een graet.

BRETAGNE

POICIEUX

TOURNAI



Bel Isle,
Boelijn.

Heis.

Alone.

S. Nicolas

De Grave

Bois

Land van
Poictou

Bois

Le four

De Ruyter
vulkaan

Roche Bernard



Pierre-perce.

Pierre-perce, but so that you come not very neere (at low water) the land somewhat to the westwardes of Poelgem, for it is not cleane alongst by it. Betwixt the Four and the point of Crofwyck it is in the fareway, eight, nine, and ten fathome deepe.

From the point of Poelgem eastwardes ly some little Islands & rockes which are very fowle, come not very neere them, nor the shoare there abouts. If it shold happen that you shold here turne to windwards, (for at low water there falleth many of the rockes dry, when you come neere the rock with the hoale) then run alongst to the northwards of it, and in very close by it, leaving it on the starboard side of you, for to avoid the fowle grounds which ly off from the point of Poelgem towards this rock. Close alongst by this rock it is foure fathome deepe. Being past this rock with the hole, then runne all alongst by the north shoare, unto S. Nazare in three or foure fathome at low water, but you must take heed of a rocky point somewhat to the westwardes of S. Nazare, the markes thereof are these. There standeth a mill upon the high land, somewhat far within the land, when that commeth over a countrey-mans house which standeth below by the river, then are you thwart of the rockes: being past them, keepe yet the north shoare, and runne alongst by it untill you come within the point of S. Nazare, and ancker there in fixe or seven fathome. In the middest of the river betwixt the foresaid rock with the hole, & S. Nazare, lieth a row of rockes called *Les Porceaux*, these come at halfe tyde above water: because of them, & also more other showlds, lying in the river, you must runne all alongst by the north shoare, as is before said.

S. Nazare.

Les Porceaux.

Somewhat within S. Nazare upon the north land, standeth a sharpe tower when that commeth without the southland, then you cannot take hurt of the foresaid rocks, runne alongst to the northwardes of them, a little to the eastwardes of them lieth another shold of rockes, where men may runne about to the eastwardes of it with great shippes, it is there very shold water alongst to the point; being within the point, men may ancker as is said in six or seven fathom. To the eastwardes of S. Nazare ly two other villages, betwixt these villages it is very shold & stony ground, there men must borrow over to the souther shoare, but when you are halfe waies to that eastermost village, then you may well saile on right with the point of the village, untill you be past it, but against that eastermost village on the south side, upon the point, lieth a banck called *Pynbuf*, which lyes at least halfe waies over in the river, but men may runne through betwixt the point and this banck in five or six fathome, this is the road for ships that are bound out to sea.

Pynbuf.

A league further in, in the middest of the river, ly two stony bancks in the fareway. At *Pelerin* is the lading place, two leagues from Nantes, where the goods is brought off with Lighters to the ships, but from S. Nazare to Nantes, or *Pelerin*, it is Pilots water, which men do commonly take in, by the abovenamed sharpe tower called S. Nazare, where men (when they are within it) may ancker in ten or twelve fathome, and stay for a Pilot.

Pelerin.

S. Nazare.

For to run into sea from S. Nazare, alongst to the southwardes of the rock with the hole, you must runne first alongst by the north shoare, as is before said, untill that you come without the second point of the River, edge then off from the north land to the middest of the river; and saile a good waies about to the southwardes of Pierre-perce, when as you can see the rock (which lieth to the northwardes of Pierre-perce) without the point, there it is deepe foure fathome and a halfe, and when as Pierre-perce is northnorthwest, & north and by west from you, then you come thwart of the rock, and there you finde deeper water, to wit, five, six and at last seven fathome, but when you come in the fareway of *Pickeliers*, then you get ten or twelve fathome water.

Banckes before the Loire.

Before the river of Nantes ly many bancks, but at halfe flood men goe over them, the south point of the river of Nantes lieth from the north point northnorthwest & southsoutheast foure leagues asunder, to the southwardes of it, the land lieth in with a great In-draught, and there men do run into the Bay. These uneven banckes in the river of Nantes,

are very unlike, sometimes men found in fiteene fathome, and presently afterwards but seven or eight fathome.

But to saile from Bell-Ile to the Bay or Armentiers, you must goe away eastsoutheast untill that you see the Abbey of Armentiers to the eastwardes of the trees, which stand within the land over the same Abbey, then goe on east, and east and by north, so long untill that the Abbey come within the castle of Armentiers, then are you within the Monke legge. Goe then againe eastsoutheast untill that you bee within the rock of Pierremen, you may goe about it on both sides, and when that you can see the Grave open, then you may ancker in seven or eight fathome, and row a shoare to fetch a Pilot, it is Pilots water. From Bell-Ile to Armentiers, the course is eastsoutheast about twelve or thirteene leagues asunder.

From Armentiers to Vse, or Heys it is south and by east seven leagues, and from Bell-Ile to Vse or Heys, southeast sixteen leagues. The Island of *Piqueliers* lieth right before the point of Armentiers. Betwixt Armentiers or *Piqueliers* and Vse, it is an uneven fareway, with many showlds and banckes from foure, five, fixe and seven fathome. Vpon Vse standeth a sharpe tower, & some little houses or milles, whereby it is very good to be knowne. It is in the fareway betwixt Vse and Bell-Ile five and thirty and fourty fathome, but when men are within the fareway, it is five and twenty fathome deepe.

Vnder Vse it is not very good riding, the sea commeth alwaies so rowling in, as if the water came through under the Island, at the north end it is shold water, the road is, when the Church steeple is southwest from you, in eight or nine fathome; but men ly there not sheltred but onely for a southwest and westsouthwest wind, and it doth ripple there alwaies very much.

Betwixt Heys and S. Martens, upon the fast land of Poitou, lieth Olone, from the west point of this bay of Olone, runneth of a riff of sundry rockes above water, east from thence lieth a banck under water, men may runne through betwixt the forenamed riff and the banck into the Bay, likewise also eastwardes of the banck along by the wall. The frenchmen many tymes runne alongst after the banck when so often they cannot otherwise come into this Bay.

From Vse to the Killiaets, or to the Island of S. Martens, the course is eastsoutheast, twelve or thirteene leagues. Betwixt both lieth the *Barges* of Olone about halfe a league off from the land of Poitou, and east and by south seven leagues from Vse in the right fareway, and in regard that it is nothing but rockes and stones, therefore it is not good to come neere them in darke weather, men may saile round about them, and at low water they are uncovered. If you will saile from Vse, unto the Killiaets, or unto the taile of Aise, through within the *Barges* then saile on first east, and being within the *Barges* of Olone, saile to the land of Poitou, which lieth from Olone to S. Martens Island eastsoutheast, and from Olone to the *Piqueliers* northwest.

Barges Olone.

of the tydes.

ON these lands, as on all the Coasts of Britaigne, a northeast and southwest moone maketh high water, & within the havens, rivers and in-draughts, a point or two later, according as they ly farre within the land.

How these lands doe lie one from the other, and from other lands.

From the east point of the Cardinall to Crofwyck east-northeast 5 leagues.
From the point of Crofwyck to Pierre-perce eastsoutheast 3 leagues.
From the Cardinall to Old-downes eastnortheast 7 leag.
From the north point of the river of Nantes to the *Piqueliers* southsouthwest 7 leagues.
From Pierremen to Armentiers westsouthwest 2 leagues.
From Armentiers or *Piqueliers* to the west end of Vse south and by east, and southsoutheast at least 7 leagues.
From

From the east end of Bell-Ile to Vse i.e. easterly 16 leagues.
From Vse to the Barges of Olone east & by south 7 leag.
From Vse to the Killiates, or S. Martins Iland eastsoutheast
12 or 13 leagues.

From Vse to Cape de Pinas southwest and by south
75 leagues.
From Vse to Cape de Ortegall southwest and by west
93 leagues.

How these lands doe shew themselves at sea.

Olone.

Thus sheweth the land of Poictou betwixt Heys and the Iland of S. Martens when you saile alongst by it foure leagues a seaboard the land.

Thus sheweth the Iland Vse, or Heys, when you saile alongst by it,
being two leagues off from it.

C H A P. I V.

The Coastes of Poictou and Santoigne, betwixt Olone and the
river of Burdeaux.



From Olone to the Killiates the coast lieth most eastsoutheast foure or five leagues. For to saile into the Killiates, which is in alongst to the northwards of the Iland of S. Martin, in betwixt the foresaid Iland and the maine land of Poictou, you must go in somewhat more northerly then the middle of the channell, or leave two third parts of the channell towards S. Martens Iland, and one third part towards the maine land. Alongst by the Iland of S. Martens it is uneven, and somewhat full of banckes; come not too neere also the maine land, for there ly off also some banckes, but you may borrow of them by your lead. Goe in alongst, as before is said, untill that the Church of S. Martin be southsouthwest from you, then you shall be past the banck which lieth north from S. Martins, and lieth off from the shoare somewhat to the westwardes of S. Martins, that is, a hard steepe stony bancke, which shewldeth up suddenly. For to avoid it when as you must turne to and againe with an easterly, or a northeast wind, you must not bring the little tower of Hars in the village of Loye, but when the little tower of Hars commeth to the first, or northermost house of Loye, then you must cast about, for then you come against the banck, where remaineth at low water about a fathome depth, and at high water about foure fathome. When the foresaid little tower of Hars commeth against a mill which standeth at the south end of Loye, then are you within the bancke, to wit, betwixt the bancke and S. Martins. When S. Martins commeth to be southwest and by south, and southsouthwest from you, then you may boldly saile over the end of the bancke towards S. Martins, you shall finde there at low water and Spring tyde at least three fathome or sixteene, or seventene foot, also one cast or two but twelve foot, then it is all soft ground, as also before S. Martins, but the banckes are hard, and with Spring tydes there remaineth little water upon them. Before S. Martins you may ancker in foure, five, or sixe fathome.

For to ancker before S. Martins, you must ancker so, that you may see open into the haven, and that the point of the Abbey, and the Bosse doe stand the length of two capstonebarres one from the other, there it is with spring tydes at low water three fathome and a halfe, but at high water sixe fathome and a halfe deepe.

When you saile into the Killiates, as before is said, it is twelve, eleven, and ten fathome deepe, but being come so farre that the tower of S. Martins beginneth to stand south-west from you, there it will be by little and little, shoulde, and then you may well edge towards the Iland in five and foure fathome, it shoulde then suddenly up, and will be from ten, quickly five, and foure fathome.

If you will goe over the banck that lieth off from the Abbey with a shippe that draweth much water, then you must stay so long that it be halfe flood, for at low water there re-

maineth no more upon it then three fathome, or a foot or two more: when it is somewhat flowed, then you may well goe over with a great shippe. When the little tower of Luffou commeth to the north end of the Iland Vrck, or Tivalenes, then are you upon the shouldest of the banck, but when the little tower commeth over the south end of that little Iland, then it beginneth to deepe againe.

The markes for to keepe the deepest water, when you runne over the bancke, are these: keepe the great Tower of Rochell a handspikes length to the southwardes of the wood of trees, which standeth upon the northermost high land, and run so over the banck, it is there all soft ground.

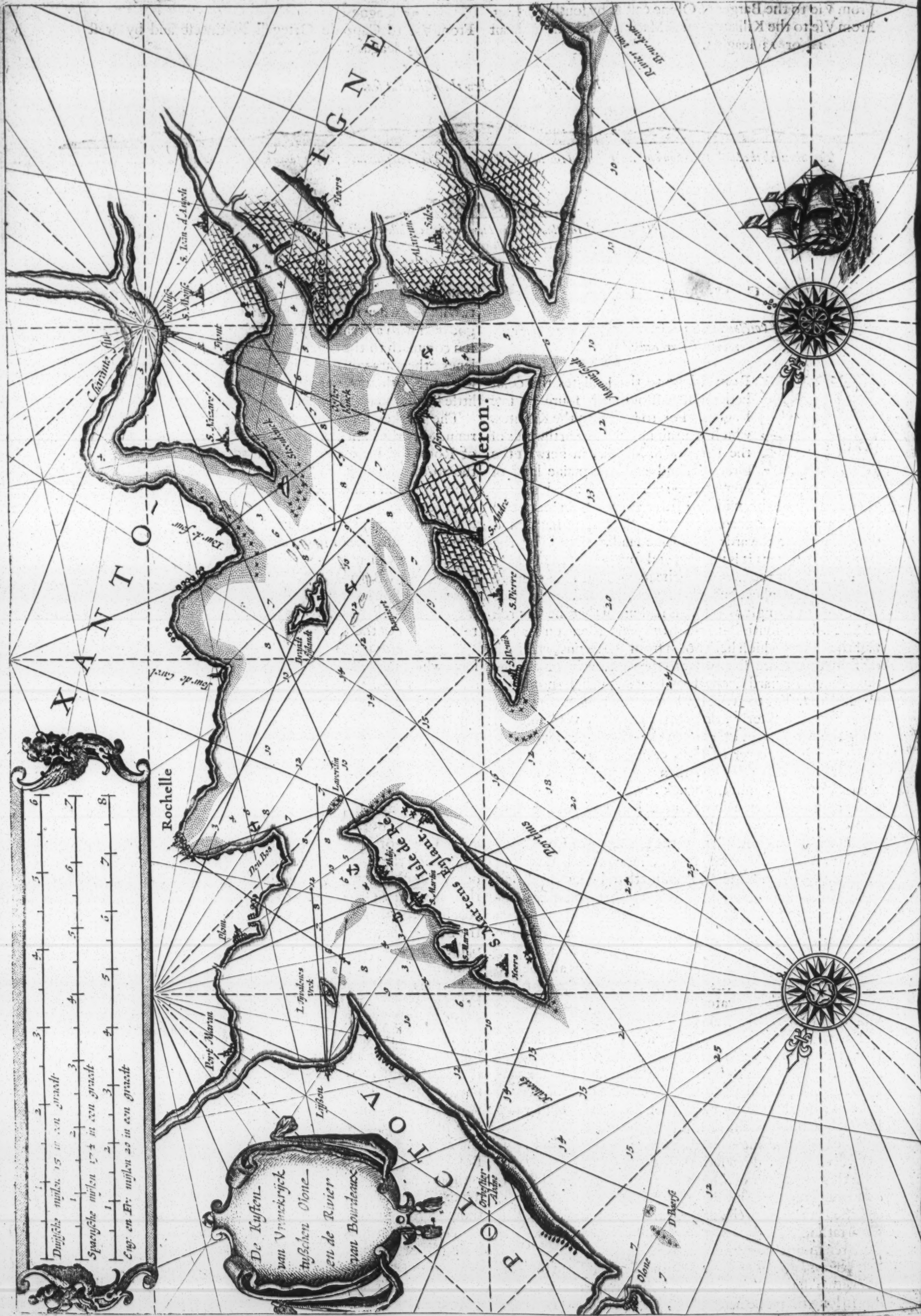
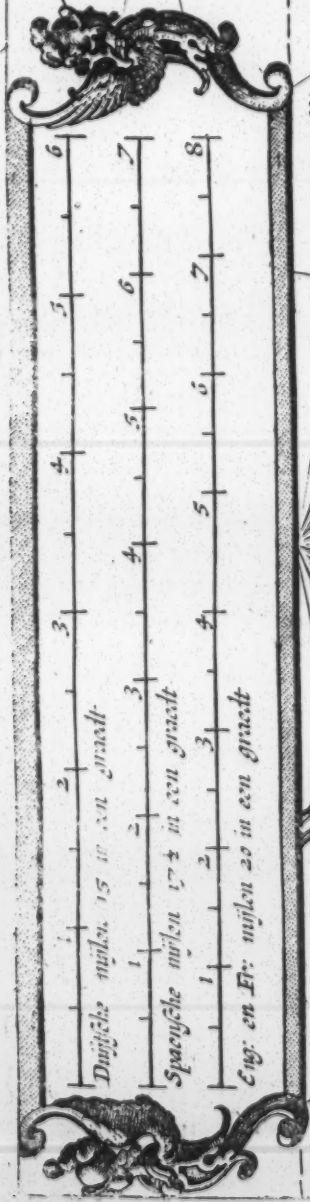
If you will ancker before the Abbey within the banck, then runne into sixe or seven fathome, and ancker there.

But if you will not ancker under S. Martens, but will saile forth towards Burnt-Iland, then bring that foresaid little tower of Luffou over the little house that standeth upon the little Iland Vrck, and keepe it so standing, and then you can take no hurt of the Laverdyne.

The Laverdyne is a rane of rocks together a musket shot long, which lieth off from the east point of S. Martens Iland, about an English mile, and with a spring at low water is uncovered. Betwixt it and the Iland of S. Martens men may saile through, there is depth enough. The markes of the Laverdyne are these: When you come in at the Killiates, and saile through betwixt S. Martens Iland and the Bosse, & you come to see the great Tower of Rochell even without the point of the Bosse, then are you right thwart of the Laverdyne, which lieth then southwest from you, it is there betwixt them both not very wide: or els when the foresaid great Tower of Rochell standeth even without the point of Bosse, and the north point of the Plom a ships length without the south point (which is the north point of the Bosse) then are you right upon the Laverdyne, therefore when Rochell commeth a shippes length to the southwardes of the Bosse (when you come in at the Killiates) then are you past the Laverdyne, and you may boldly goe on southeast, and southeast and by south towards Burnt-Iland.

Porthus is a broad and wide channell, lying in through betwixt S. Martens Iland and Oleron, and lieth from Vse fourtheast and by east distant about fifteene leagues. If you will saile into Porthus, then runne in betwixt both lands east-southeast, but much neerer S. Martens Iland, for to avoid the Bank of Oleron, which is a fowle ledge of rockes at the north end of Oleron, come no neerer it by night then in twelve or thirteene fathome.

When you come then by the east end of S. Martens Iland, and are bound to Rochell, or els will ancker under the Bosse, bring the great Tower of Rochell a ships length without the Bosse, so you can take no hurt of the Laverdyne. You may ancker under the Bosse in five or sixe fathome soft ground, so that the point doe ly north from you. Or els if you will ancker under the Abbey of S. Martens Iland, then runne in upon the foresaid markes, so long untill that the foresaid Abbey come without the south point of the same Iland, saile then right with it, and then you shall leave the Laverdyne farre enough on the larboard side of you.



you. And being come neere the Abbey, ancker a little to the eastwardes of it in five, fixe, or seven fathome, there is the road for shippes that are bound out.

When you saile into Porthus, and will goe to the Burnt Iland, then runne in (as before is said) untill you come neere the east end of S. Martens Iland: from thence the course is southeast and by east, or from the Bosse south or south and by east, or with a westerly wind south and by west unto that Iland.

When you saile so neere Burnt Iland, that the tower of Voorn, or the Four, commeth over the Burnt Iland, there you may cast your ballast over boord, it is there twelve fathome deepe.

If you must turne to and againe with a southerly winde from the Bosse to the Burnt Iland, or from Burnt Iland to the Bosse, then come not too neere to the land of Rochell, there ly divers stony banckes alongst the land, a good waies from the shoare, whereof you must take heed. When Rochell is hidden behind the south point which lieth over against the Creeke, there lieth a stony banck, upon which remaineth not a fathome of water.

If you will saile into the River of Sherrant, then runne about to the southwardes of Burnt Iland, you may also saile about to the northwardes of it, and saile in by the Tower of Voorne, or Four. At low water this river falleth dry, at least foure leagues within the land. For to saile from Burnt Iland to Burwage, you must saile away southsoutheast and keepe the little tower of Heers to the westwardes of the wood, so long untill the Tower of Voorn or le Four, come over the little red tyled house, that stands upon the south side of the river of Sherrant, saile then in southeast, and by little and little southeast and by east, untill that Front (a village that lieth upon the strand) commeth to the northwardes of Soubise, when as then Soubise commeth within the foresaid village, and the mill above the village, then you shall be against the point of the Oyfter-banck, go then in alongst southeast & by south, and bring that outermost little tower of Heers, over the outermost sandy place, where the galloves standeth by, keepe them so standing, and saile in southsoutheast, when as then the little tower of Heers commeth to the east side of the valley which is in the wood, then keep that sharpe little tower right over the east side of the valley of the wood, and saile in so into the Creeke, or river of Burwage. At Burwage was wont not to stand a house, where now is a strong faire towne, being builded so within seventy or eighty yeares past.

The Baniard lieth alongst the land of Oleron, and lieth untill within Burnt Iland, at low water it is uncovered, and the taile of it lieth farre to the northwardes. If you shold turne out from the Creeke towards the Burnt Iland, then bring the Tower of Rochell not without the Burnt Iland, before you come thwart of it, because of the Baniard, and then you shall take no hurt of it.

At the south end of Oleron, betwixt Oleron and the land to the southwardes of it, is yet another channell, where men may saile in and out, called the Mamme-sound, deepe enough for great shippes, it lieth in from out of the sea east and by north, it is a dangerous point, for almost from both hooches, runneth of a riff almost with the points meeting on another. The south point is very broad and flat, the wind blowing out of the west, you can very hardly see the Bay for the branding of the water over the whole Bay, the haven in the middelt is fixe, seven and eight fathom deepe, you must loock narrowly too, that you fall not thwart in there, for yee shold loose your ship. Being come there within, there runneth up a river s. e. towards Sales, the salt which men doe lade their is called after the name of the river Sudderfalt, being past that, to the other point of the Mamme-sound, lieth a plate, whereof men runne to the northwardes upon these markes: you must keepe the mill that standeth upon the land of Oleron over the trees, and so you shall runne to the northwardes of the Plate, there is the road for them that will lade salt at Oleron or Olderdon.

But if you will runne in through, and out againe, then you must saile so farre to the eastwardes, untill that Sales come over the trees, which stand within Merven, for to avoid the taile or riffe that shooteth off from Oleron: when Sales commeth over the trees, saile then north and by west on, to the Burnt Iland, but bring Duke Charles tower to the southwardes of the Burnt Iland, for not to saile within the Baniard. When the little Tower of Heers commeth to the wood, keepe it then so standing untill that Rochell commeth over the north side of the Burnt Iland, saile then out at the Por-
Riffe de
thus. There shooteth off also a riffe from the west end of S. Martens
Iland, whereof you must take heed.

About south, or a little more westerly, thirteen leagues from the Iland Vse, southwest and by west from the Iland S. Martens, and westnorthwest or somewhat more northerly from the river of Burdeaux, ly the rockes of Rockedon, or Rochebon, of some called Vrkamia, in forme of a Trevet
Rockes or
Rochebon. The southermost of the three is the showldest, whereupon remaineth at low water about two fathome depth: at the southwest side the ground is black little stones, and at the northeast side white sand, but you may not come neere them by your lead, to sound by them.

A little to the westwardes, not farre from the foresaid rocks, lieth yet another rock, whereupon is at low water five fathome water, neverthlesse with a storm the sea breaketh terribly upon it.

Of the tydes.

ON these coasts and Ilands a southwest and northeast moone maketh high water, within the havens and rivers a point or two later, according as they ly farre within the land.

Of the depths thwart of these lands, and in what depths men may see them, and by what marks men may know them.

Without Vse it is five and thirty fathome deepe, & then men may see the land from below: when it is cleare weather men may see it in sixty fathome.

The land of Olone men may see it from below in five and twenty and thirty fathome.

S. Martens Iland and the north end of Oleron men may see in eight and twenty and thirty fathome. When men get sight of S. Martens Iland, they shall see upon it a high tower, with a high house, and upon the strand a mill with foure or five high sand-hills. Vpon Oleron men shall see a high spire tower upon a red point, where men shall see some trees stand over it, and to the southwardes of it is at two or three places ragged sand-hills.

How these lands doe lie one from the other, and from other lands.

FROM Vse to S. Martens Iland, or the Killiates, the course is eastsoutheast 12 or 13 leagues.
From Vse to Porthus, or the Band of Oleron the course is southeast and by east 15 or 16 leagues.
From the Band or Craghe of Oleron to the tower of Cordan southsoutheast and south and by east 13 leagues.
From S. Martens Iland to the tower of Cordan or the river of Burdeaux southsoutheast 16 leagues.
From S. Martens Iland to C. de Pinas southwest 80 leagues.
From S. Martens Iland to Ortegall, the course is westsouthwest somewhat southerly 99 leagues.

Heights of these lands.

THE Iland Bell-Ile lieth in 47 degr. 50 min.
The Iland Vse in 46 degr. 48 min.
The middest of S. Martens Ile in 46 degr. 26 min.
The north point of Oleron in 46 degr. 15 min.

How these lands doe shew themselves at sea.

Sandy hilles.



This coast lieth southsoutheast.

Thus sheweth the west end of the Iland of S. Martens.



This belongeth to the former figure from the west end of S. Martens Iland, and sheweth it selfe thus when the steeple is east and by south from you three or foure leagues off, the coast lieth beere eastsoutheast and westnorthwest.



When S. Martens Iland is north and by east from you, is sheweth it selfe thus.

When men saile out or in at Porthus, S. Martens Iland sheweth it selfe in this forme.



Thus sheweth the south side of S. Martens Iland, when the tower or west end is north, and the east end north-east three or foure leagues off from you.



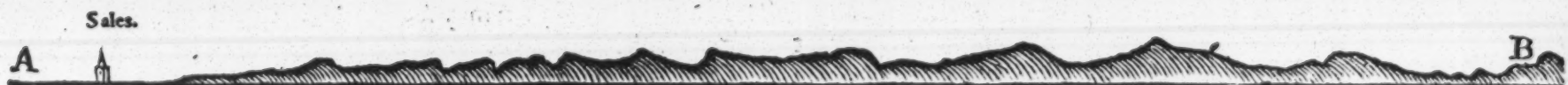
The west point of Oleron, or Olderdon sheweth it selfe thus, when it is east from you two great leagues. Thereabouts it is twenty fathome deepe.



When you are before Porthus about two or three leagues from land, then doth Oleron or Olderdon arise in this forme.

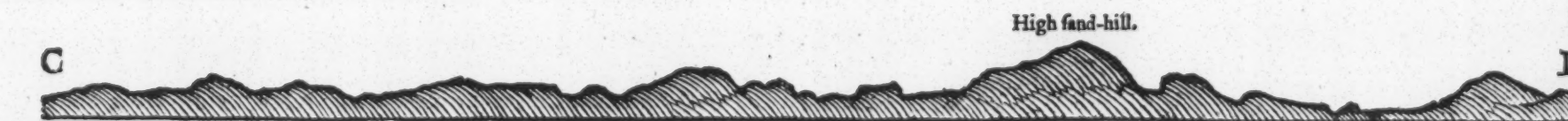
The land betwixt Olderdon and the river of Bordeaux sheweth (when men saile alongst by it) as is portrayed in these five following figures, the letters of one sort belong one to the other, as AA, BB, CC, DD.

The Iland Olderdon.



Sales.

Thus sheweth Sales when it is east and by north from you, being about a league without the land.



High sand-hill.



Cordan.

C H A P. V.

The Description of the river of Burdeaux, and the haven of Arcachon.



From the Band or Cragge of Oleron to the Tower of Cordan, or the Pole-head, or the mouth of the river of Burdeaux, called the Garonne, lieth the land south-east and southeast and by east thirteene leagues.

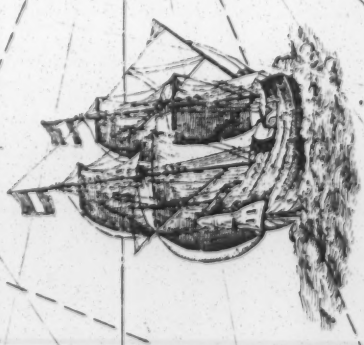
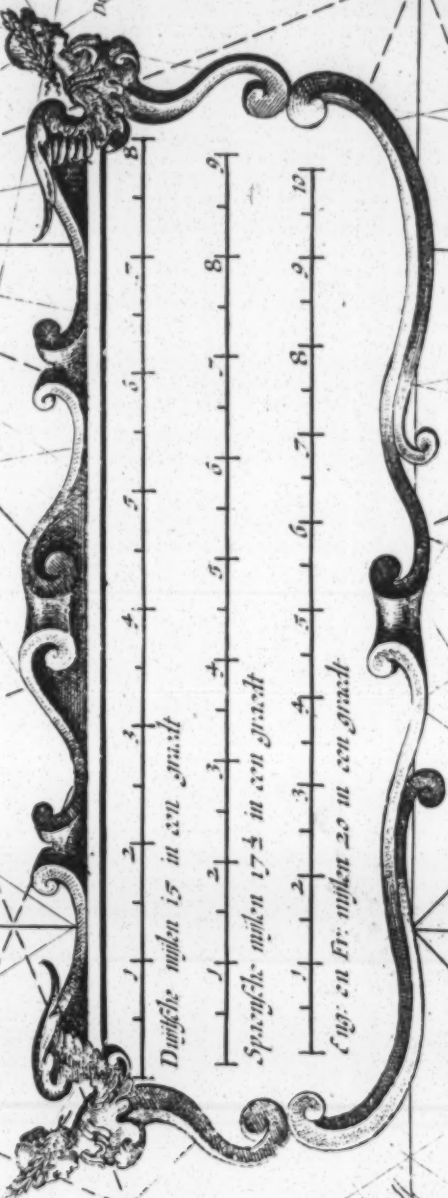
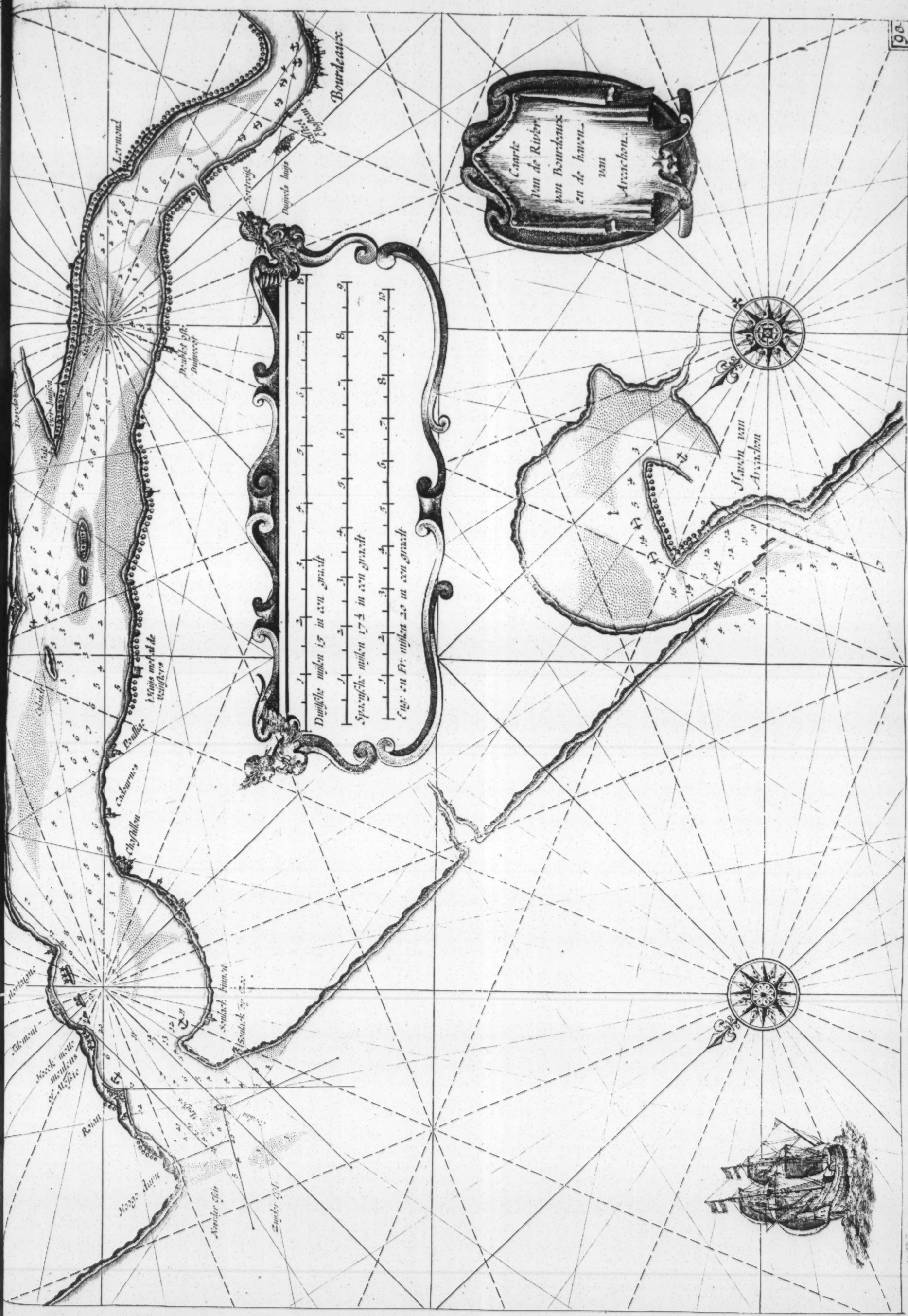
To the northwardes of the mouth of the river of Burdeaux, ly five or sixe high white sand-hilles, but to the southwardes of it, it is somewhat low land, black little sand-hilles, being growne with spiry grasse.

From the Tower of Cordan off to the northwardes, towards the high sand-hilles which ly upon the northland,

lieth a sandbanck called the Piper men may found alongst Piper by it on the west side in seven fathome, but upon the north end it is very steepe, and not farre off it is twenty fathome deepe.

From the north point of the River runneth off to the southwardes, a sand called the Norther Affes, and to the southwardes of it lieth another sand called the Souther Affes, through betwixt them both, and also alongst to the southwardes of them men saile into the river.

If you will saile into the river comming from the northwardes, then you may runne alongst by the shoare in twelve and thirteene fathome, untill that the tower of Cordan stand southeast and by east from you, runne then right in with it, through betwixt the norther and the souther Affes, untill that the high white sandhill upon the north point of the river stand northnortheast from you, men may so (comming from the northwardes) runne in also about by the norther



norther Asses, by your lead, untill that the tower come to be southsoutheast, and southeast and by south from you, then goe towards the tower, and when the foresaid high sandhill commeth to be northnortheast or northeast and by north from you, saile then right in with it, untill that you have the sounding of the land, runne then in alongst by it towards Messie, that is the point where all the milles stand. When you shall saile thus towards the high sandhill, & that the tower of Soulack commeth a great fathome to the northwards of the tower of Cordan, and the little mill of Royan come in the wood by Royan, then are you also past the Piper, and may runne in right east without feare towards Royan, but you must reckon well your tyde, for the flood falleth thwart over the Asses towards the tower of Cordan, and the ebbe to the contrary. In this foresaid channell through betwixt the Asses remaineth at low water three fathome water upon the showldest.

For to saile into the river alongst to the southwardes of the Asses, comming from the northwardes, (that is, the best channell) you must doe thus: Bring the tower of Soulack east from you, or somewhat more northerly, and saile in so right with it, untill the tower of Cordan be north and by east, and northnortheast from you, Royan shall then stand northeast from you, or elsif you come from the southwardes, then bring the Tower of Cordan north and by east, and northnortheast from you, and saile in so right with it, untill Soulack come to be east from you, Royan shall then stand northeast from you, saile then right towards it, and comming neere it, saile to the point of Messie.

When you are now within the rivers mouth, and come right against the point of Messie, that is the point where the milles stand upon, then edge over towards the broken Cattle called Chastillion, southeast and by south, that is, eight leagues from Messie, and then forth in alongst by the south land, southeast in unto Pouliack, which is two great leagues.

In the fareway betwixt the Piper and the point with the milles, or Messie, it is ten, eleven, and twelve fathome deep; but out of the fareway, either on the north side, or south side, it is showlder, to wit, five, sixe, seven, and eight fathome, you must runne alongst close by the point of Messie, there it is two and twenty fathome deepe.

When as that Royan commeth to the west point, whereupon the milles stand, keepe it so standing, and goe away southeast & by south towards Chastillion, it is in this fareway almost all alongst five fathome deepe, but comming neere the north or south side, it is showlder, and at the north side it is full of sandes, where also men may well saile through that are acquainted.

From Chastillion to Pouliack it is two great leagues southeast, the course is as before is said, and it is there deep foure, five, sixe, and seven fathome. Over against Pouliack in the midst of the river lieth a little Iland to the eastwardes, men must runne about it, right in with Bloye, but there men must goe over with the tyde, for it is there at low water but a little more then one fathome deepe.

When you are before Pouliack, and will saile to Bloye, then let the water first flow an houre, and then you may well goe over with a ship that draweth nine or ten foote water. The markes for to saile alongst in the deepest water of this reach, are these: there standeth a mill halfe wayes betwixt Bloye and Rocketaw, keepe that without the new wall of Bloye, & then you shall run in the deepest of the channell.

Before Bloye it is againe three or foure fathome deepe, runne then alongst by the northland in three, foure, and five fathome. When you come before the River which lieth up to the eastwardes called Dordoigne, then saile first right with the midst of the second Iland, and leave it on the starboard side, and goe indifferent neere alongst by it, untill that you be over against or past the gallows, which standeth upon the east point of the river: and then again alongst by the northland unto the foure little houses. From thence you must edge over to the high tower of Dublot or Pigeonhouse, comming thwart of it, you must presently edge over again to the east side, to the bight neer Lermond, in that

edging over you shall runne through betwixt a stone banck on the larboard side, and a showld sand-plate on the starboard side, over a banck called the Pace, which is the showldest of all the river, there remaineth at low water a little lesse then a fathome. Being come over the Pace to the east side, go then in alongst by the east shoare, untill you be past Lermond, then saile againe over to the west side, right with the houses of Charterhouse, and then in all alongst by the west shoare, untill you come before the town of Burdeaux, in that crooked reach betwixt Lermond and Charterhouse it is five, sixe, and seven fathome deepe, and before the towne foure and five fathome.

When men will saile out of the river of Burdeaux, they must stay at Royan untill they have good weather, and a fore-ebbe to runne out with: in running out, keepe the high sandhill northnortheast from you, so long untill that the tower of Cordan be southeast and by east from you, then you may saile out through the Asses northwest and by west into sea.

From Cordan, or the river of Burdeaux, unto Arcachon, the coast lieth south and north twenty leagues, it is all low sandy land, betwixt them both lieth a tyde-haven called Anchises, men may goe in there well at high water with great shippes.

Before the haven of Arcachon, or Arcason, ly three little Ilands, men may saile in to the northwardes of them, and also in to the southwardes of them: the norther entry goeth in betwixt the north point & the northermost Iland, but it is narrow and not deepe. The souther entry lieth to the southwardes of all the Ilands by the souther point, in betwixt two showld sandbanckes, whereof the one lieth off from the southermost Iland, and the other from the south point of the maine land, southwest & by west into sea. The land to the northwardes of this haven is altogether somewhat low sandy land without trees, but to the southwardes of it there all somewhat high sandhills without trees also, but comming before the havens mouth, you shall see within in the land many trees. When you come out of the sea either from the northwardes or the southwardes, neere about this havens mouth, you shall easily espy the foresaid banckes on both sides of the souther entry, by the breaking of the sea, and you may borrow of them by your lead, as neere as you please, they are very cleane and flat. Vpon the sandhills within the havens mouth, stand two great high mastes. If you will saile in there, then bring the two mast one in the other, and then they shall stand northeast and by east from you, keepe them one in the other, and saile in so right with them, and you shall so saile in betwixt the two foresaid banckes, and at low water you shall not finde lesse then two fathome water, but at high water you shall have five, and a halfe, and sixe fathome water, goe in so upon the markes, untill you come within the Ilands, and to the end of the showld sand on the larboard side. Being gotten in within it, you must luff up about it, and goe then on north untill you come to the point, which you shall see on the starboard side, but give that a birth because there runneth off a taile: there is in that reach not lesse then ten, eleven, or twelve fathome deep. Being come about that point, you may then saile in close alongst by the land on the starboard side, which lieth e.s.e. or you may anker there in 16, 15, 12, and 10 fathome, or further in about the second point in two and three fathome. Over against the first point, on the north side, it falleth very farre dry, a great wayes within.

Of the tydes.

Like as on all the coastes of France, so also at the mouth of the river of Burdeaux, maketh high water a southwest and northeast moone.

Of the depths.

The land against the River of Burdeaux men may see from the poop in thirty fathome, and the Tower of Cordan in seven and twenty fathome.

From Cordan to Arcason south 20 leagues.
From Arcason to Bayone south 16 or 17 leagues.
From the Tower Cordan to Cape de Pinas westsouthwest
somewhat southerly 75 leagues.

Heights.

The Tower of Cordan lieth in 45 degrees 45 minutes.
Arcason in 44 degrees 40 minutes.

C H A P. V I.

The Coastes of France and Biskaye, betwixt Archacon and the
Cape de Martinchaco.



From Arcason to Bayone the coast lieth south and north fixeene or seventeene leagues. The Rivers mouth of Bayone lieth in betwixt two plaine strands east-southeast, and east and by south, and sometimes more easterly or northerly, by reason of the shifting and altering of the sands before the rivers mouth. Vpon the land on the south side of the channell, stand two masts, these you must keep one in the other, or the innermost a little to the northwardes of the outermost, and runne so in over the Barre or showldst place, untill you come against the south point, & then in alongst by it. Vpon the foresaid Barre is at high water & Spring tyde, at least three fathome, with an ordinary tyde two fathome and a halfe, but at low water no more then three foot water. When you come about the point, you must saile up to the southwards, keeping about the middle of the channell alongst the river, or rather neereft the west side, for to avoid some fowle ground & showlds, that ly on the east side, and ancker before the towne in 4, 5, or 6 fathome. This Barre and this River is Pilotes water.

A little within this Barre on the north side of the river lieth up to the northwards, a great water within of seven leagues long, and falleth out into sea by Cabritton. Alongst that great water the ships were wont to saile up to Bayone, but it is now upon the south end at the river of Bayone, almost altogether paled to, so that there can but small barkes goe through, for to keepe the better the Barre of Bayone deepe with scowring through of the water.

From the Barre of Bayone to S. Iohn de Luz, the course is south & by west foure leagues, there is a faire Bay, where men may ride in five, fixe, seven, or eight fathome, according as they will ly farre in, cleane sandy ground, at the end of the Bay is a little tyde-haven, where upon lieth the towne on the west side. At high water, and with on ordinary tyde, there commeth nine foot, but with a spring twelve foot water, at low water it falleth altogether dry, so that men may goe over there with dry feete. A little within the west point of the Bay is also a little Dock, where there is a foot water more then in the foresaid tyde-haven, but it falleth also dry at low water.

This Bay is very good to know by these marks that hereafter are written; It lieth right in the Bight, to the eastwardes of it lieth the land north and by east towards Bayone, and to the westwardes of it the land falleth away southwest and by west, and southwest towards Fonteravia. Vpon the east point of the Bay standeth a white Fire-tower, which men may see farre off, especially when the Sonne shineth upon it, then it shineth very white more then the other land. Vpon the west point standeth a flat white house a little wayes upon the high land, and to the westwardes of the Bay it is upon the sea side gray and blewish land. Also the high hill of S. Iohn de Luz, is a good marke for to know this Bay, which remaineth in failing in, lying somewhat to the eastwardes, or on the larboard side. This foresaid hill of S. Iohn de Luz sheweth it selfe out in height above all other hilles thereabouts, & thereby is very good to bee knowne: above upon the top it is somewhat flat, as is demonstrated in the

rising of the lands. Vpon this foresaid hill standeth a Chappell, from whence men may see into foure kingdomes, France, Spaine, Navarre, and Arragon.

About two leagues southwest and southwest and by west from S. Iohn de Luz, ly the rocks called the Pignons of S. Anna, not farre from land: a league to the westwardes of them, lieth the Bay of Fonteravia, being a faire Bay.

At the west point of the Bay lieth the C. Figuer, a high point, upon it standeth a castle, and to the southwardes of it a little chappell. At the point of this cape lieth a rock a little wayes from it, but the sea cannot runne through betwixt them, except it be with very high floods, it breaketh a little through. At the east side of this bay ly two high rocks, and thwart of them ly also some low rocks a good wayes off from the land. For to avoid them, you must saile in by the west point for to come into this Bay, and being within it, you may ancker in eight or nine fathome, but so that the foresaid great rock at the C. Figuer stand northnorthwest from you, there you ly in faire sandy ground, and landlockt for a n.w. wind. The Kroonenbergh lieth about halfe wayes betwixt S. Iohn de Luz & this foresaid Bay of Fonteravia.

A little league to the westwardes of Cape de Figuer, lieth Passage also a faire haven. At the west side of the havens mouth, which is very narrow, lieth a round rock, so that it is evill to come in there with an ebbe, but with a flood it is better, without it is very cleane, without any showlds or fowle grounds, but onely the foresaid round rocke. The towne lieth a little within the haven on the west side, where men doe ly before it in seven fathome.

Two great leagues to the westwardes of Passage, lieth S. Sebastians, betwixt both is also a sandbay in a bight, where there goeth up into the land a showld little river, where come in many barkes.

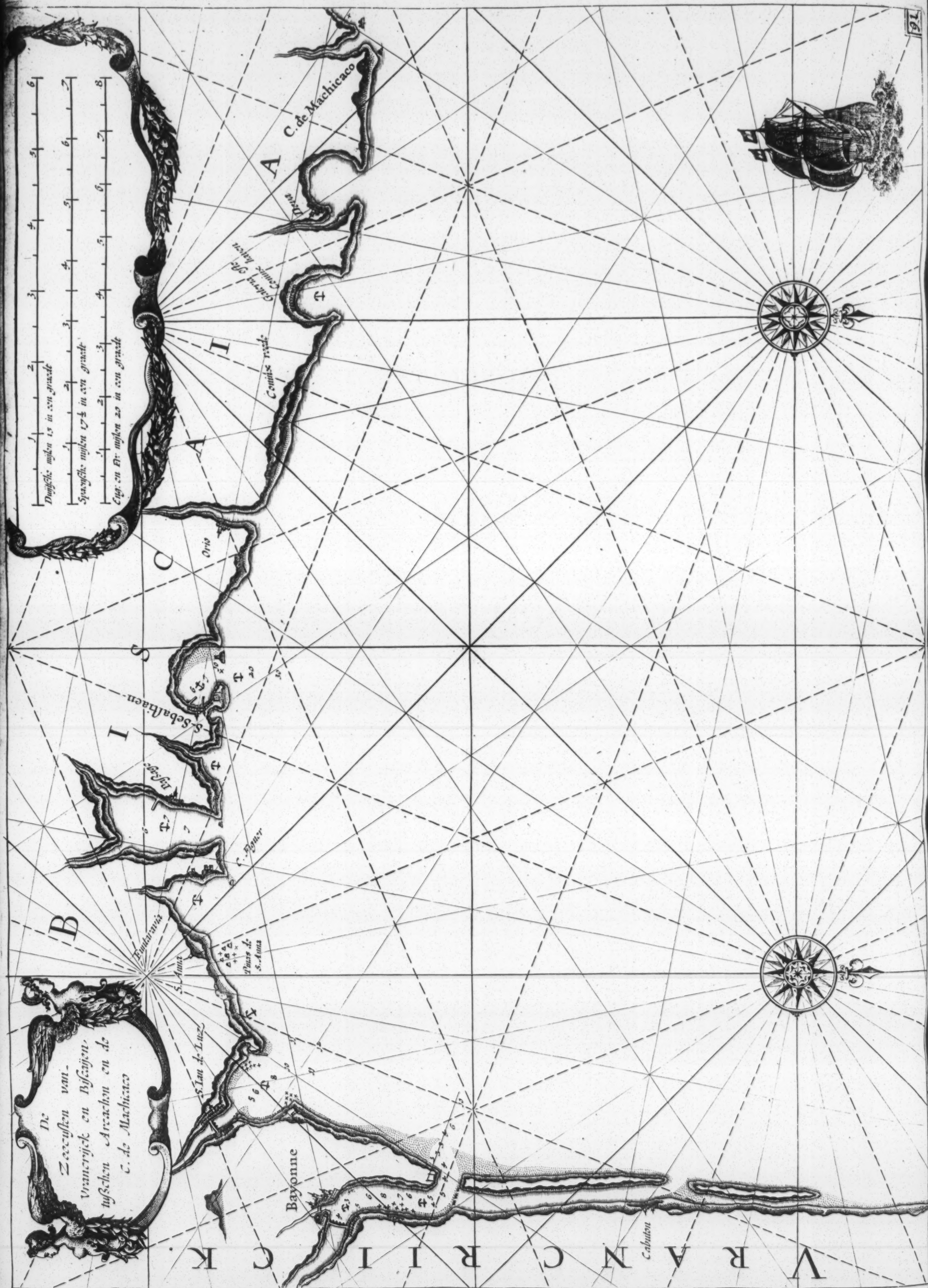
The haven of S. Sebastians is good for to come into, men doe runne in there betwixt two little castles, wherof the eastermost is the greatest, standing upon a high hill. The westermost is a little square tower, and lieth upon a little Iland, or rock. In the havens mouth being narrow, betwixt the two foresaid little Castles, lieth a rock, which at low water is fixe fathome deepe, and when it is a storme out of the sea, it breaketh alwayes upon it, and lieth neereft the castland, by the westland it is deepe ten fathome. Now for to avoid the foresaid rock in comming in, there commeth an Abbey to the eastwardes of the westermost Iland, and a little tower. If you keepe them one in the other, then you runne in to the eastwardes of it.

For to ancker without S. Sebastians in the road, you must keepe the high hill which lieth upon the point of C. Figuer, without the foresaid eastermost castle, there you may ancker, but if the same come to be hidden behind the castle or Iland, then you may not ancker in the road of Saint Sebastians. When you are come through the narrow within the rock and the castles, then you may ancker at the east side under the great castle, there is the best road. Within the foresaid castle goeth up a little water, men may goe at low water a foot from the easter castle alongst a high strand upon the maine land, unto the towne, which lieth behind the foresaid high hill with the Castle, yet the strand at high water is covered; it is a bay, and within before the towne it is deepe five, fixe, and seven fathome; at the west side under the little Iland, men may not ancker, because it is flat and showld there.

He that will goe forth from thence into S. Sebastians, let him runne in, keeping the middle channell, betwixt the two Ilands, and let him leave the little Iland whereupon the chappell standeth on the starboard side, running in so right against the first or the second wall of the towne, and ancker there, the boats or shallops shall come aboard of him, and helpe him into the haven betwixt the walles.

A league to the westwardes of Saint Sebastians, lieth a sandbay, where men may ancker so deepe and so shallow as they will.

From S. Sebastians to Cape de Martinchaco the course is westnorthwest thirteen leagues. Betwixt them both ly the roades Gateria and Deva.



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Gateria lieth from S. Sebastians west and by north, and westnorthwest distant eight leagues, being a faire round sandbay, where is good riding for westerly winds, menly there within the west point right before the towne, in faire sandy ground, a north wind commeth right from the point. This Bay is commonly called Kingshaven.

Alongst the coast of Biscay, betwixt S. Iohn de Luz and Gateria is every where cleane ground and good anckering in twenty fathome.

From Gateria to Deva it is a league and a halfe to the westwardes: which is an off-water that commeth out of the high land.

Two leagues to the westwards lieth the point of C. Martinchaco.

Of the tydes, and course of the streames.

ON these coastes likewise; as on the former, men find no course of streames, but a southeast and northwest moon maketh in every place on the coastes the highest water, and within the rivers a point later.

Of the depths thwart of these lands.

Betwixt Arcason, and S. Iohn de Luz, men may see the land in thirty fathome, when men are about Bayone, they shall see Cabritton, Bayone, Bedort, and S. Iohn de Luz, almost all flat towers.

Being before Passage, men may see also the point C. Figuer, & S. Sebastians, the land lieth in there with a great bay.

About C. de Figuer lieth a high hill, which at the south-west end is very steepe, and goeth very long sloping downe towards the north.

When men are before S. Sebastians seven or eight leagues without the land, then it riseth somewhat long, and at the west end steepe and hollow, but when men come close by the land, then it is very high and steepe.

When men are eight leagues without S. Sebastians, then may they see the eastermost or greatest castle upon the high hill, and also the little lland to the westwards of it.

How these lands doe lie one from the other, and from other lands.

From Arcason to Bayone south	16 or 17 leagues.
From Bayone to S. Iohn de Luz f. & by w.	4 leagues.
From S. Iohn de Luz to the Pignons of S. Anna, southwest and by west	2 leagues.
From S. Iohn de Luz to S. Sebastians west	8 leagues.
From S. Sebastians to Gateria west and by north, and west northwest	8 leagues.
From Gateria to Cape Martinchaco northwest	5 or 6 leag.
From Bayone to the Seames northwest	112 leagues.
From S. Sebastians to Bell-Ile northnorthwest somewhat northerly	86 leagues.
From S. Sebastians to the Seames n. w. & by n.	112 leag.

Heights.

Bayone lieth in	43 degr. 45 min.
The Cape de Martinchaco in	43 degr. 46 min.

How these lands doe shew themselves at sea.

Cabritton. Bayone. S. Iohn de Luz. Fonteravia. Passage. S. Sebastians.

Thus sheweth the land about the bight of S. Iohn de Luz, off from Cabritton untill past S. Sebastians.

Thus sheweth S. Sebastians, when you get first sight of it, being seven leagues off from it.

Hill of S. Iohn de Luz.

Ianni. Bocon. Cabritton.

whitdown

Kroonenbergh.

Fonteravia.

C. Figuer.

The foresaid land about the bight of S. Iohn the Luz from the northwards of Cabritton untill past Fonteravia, sheweth thus, as is demonstrated in these two figures, when you are before the barre of Bayone.

Hill of S. Iohn de Luz, south five leagues.

Kroonenbergh.

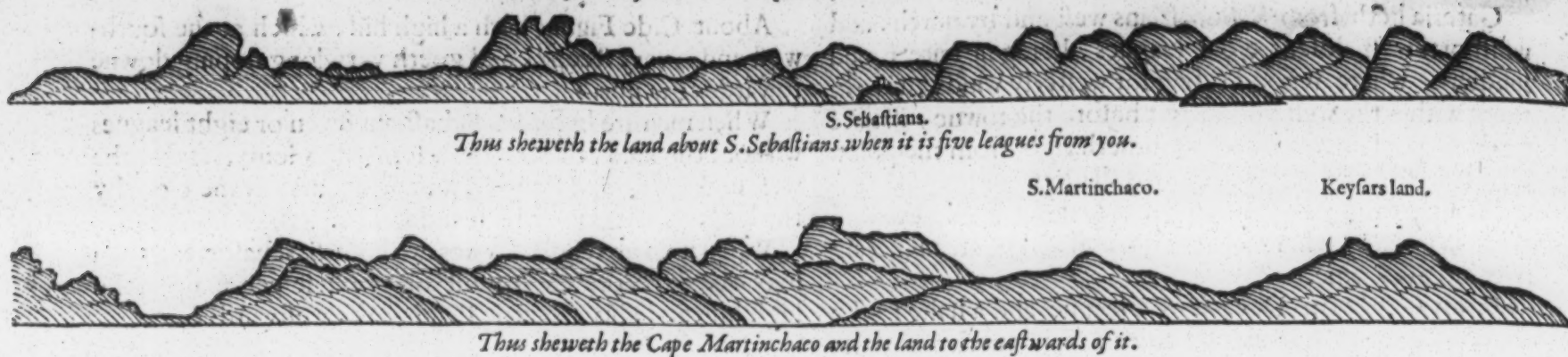
Fonteravia.

C. Figuer.

S. Sebastians.

When the Hill of S. Iohn de Luz is south from you five leagues, then the land to the eastwards of it, untill past S. Sebastians, sheweth as is here above portrayed in these two figures, the BB and CC belong one to the other.

Tha



C H A P. VII.

The Coastes of Biskaye, betwixt Cape de Martinchaco
and the Cape de Pinas.



He Cape de Martinchaco lieth about thirteene leagues westnorthwest from S. Sebastians, a little to the westwardes of it is a good tyde-haven, wherein lieth a little towne about a league within the land, upon a river which commeth out of the high land. A little to the westwardes of Cape de Martinchaco, lieth a great rock fast to the land, and a little to the westwardes of the same, another: upon the point called *Punte de Avillanes*. Southwest and by west from Martinchaco lieth the haven of Barmea, a faire great Bay, the easter point is foule, therefore men must give it a good birth, and runne in alongst by the west side, when they are gotten in it is large enough, there they may ancker where they will.

Barmea.

Placentia.

To the westwardes of Barmea, lieth also placentia upon a little River, the towne lieth a little within the land. These are all tyde havens.

Bilbao.

From Cape de Martinchaco to Bilbao, (where betwixt ly the foresaid havens of Barmea and Placentia) it is southsouthwest and southwest and by south seven leagues.

From Placentia to Bilbao it is two leagues westsouthwest and west and by south. Bilbao lieth upon a great river, alongst which there commeth off much Iron, it is a good haven, but it lieth not farre in, by reason of the Barre which lieth thwart over the haven, where men must goe in with high water.

At the east point of Bilbao shooteth off a riffe, which men must avoid, there ly also some rockes under water. It is a high steepe point, and is white to see to.

Within the riffe that runneth off from the point, men may ancker in seven and eight fathome, betwixt the point and the Piere on the east side, there the Pilotes come off which bring up the shippes; and there men ly landlockt for a northwest wind. From this foresaid point or road to the Bare or rivers mouth of Bilbao, it is a league and a halfe fourth and by west, which lieth in by the westland, there stand five or sixe houses upon the westland, when the two westermost houses come one in the other, or when you may see through the two eastermost houses, which stand within in the land, then are you upon the Bar or shold, then goe in south, and south and by east right with the Castle Portugallotto, and alongst close by the Castle, and ancker a little within the Castle for a west wind. But when you are before the Barre, the Pilotes come off & bring you to the towne.

When you ly without in the Bay, then you may see Mount Anthony ly west and by north from you.

Castro.

From the point of Bilbao to Castro, the course is west five leagues, that is a good haven of fixe, seven, and eight fathome depth. The narrow of the haven lieth in south in ten fathome. But further in the river towards the towne, it is not deeper then three or foure fathome.

M.S. Anthony.

From Bilbao to the hill of S. Anthonies, it is west and by north nine or ten leagues. From Castro to Laredo, the course is west distant five leagues, upon the west side lieth the foresaid hill of S. Anthonies, which is a high hill, men may faile in close alongst by it, untill they come about the east point; within, it is wide and broad, and a fit haven for

great ships, there men may ancker in seven or eight fathom. To the eastwards over against the hill of S. Anthonies, in the Sunken middest of the sound, lieth a rane of rocks under water, where men may faile in about it on both sides, men may easily espy them, because it doth alwaies break upon them, within them is the road for ordinary ships, a little before the haven, which is built with a wall; but the great ships ly a little further off in fixe or seven fathome depth. On the south side of the haven is a little tyde-haven, from the same there commeth a great riffe shooting off from the east side, towards the hill of S. Anthonies; within it is two fathome water, right before the village, from the village commeth a taile of sand, lying thwart out, within it at low water it is a fathome deepe. In the middest of the sound it is nine fathome, and at the point of S. Anthonies 20 fathome deepe.

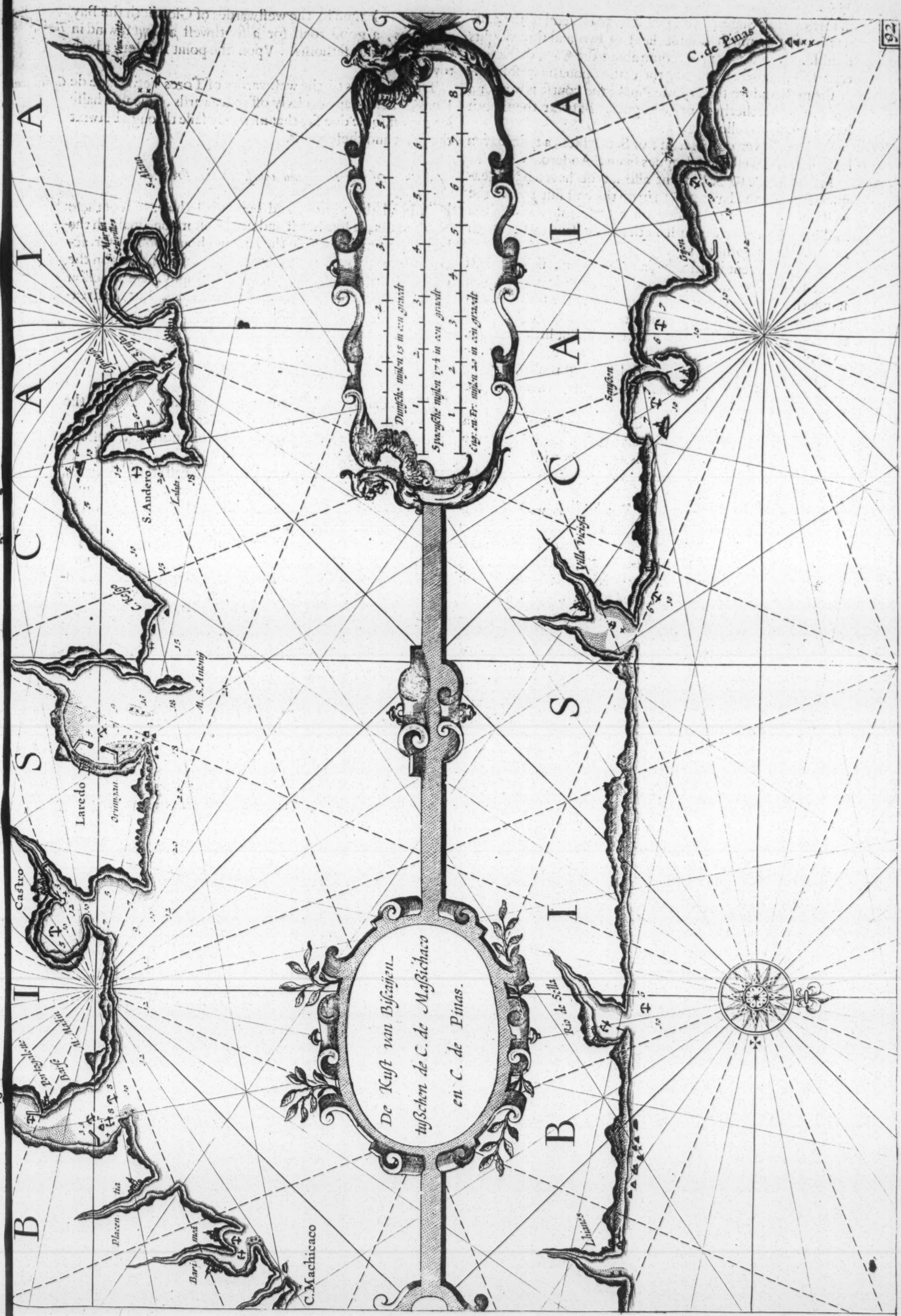
From S. Anthonies hill to Cape de Kesgo it is west & west and by south two leagues, that is a great Cape lying to the eastwardes of S. Andero: thwart of it is cleane ground.

From Cape de Kesgo to the west point of S. Andero, it is west and by south five leagues, a little to the southwardes of the point of S. Andero, upon the east point of Sardinis, is a sandbay, there is good anckering in ten fathome.

From C. de Kesgo to the haven of S. Andero, the course is westsouthwest distant two great leagues. S. Andero lieth within a Bay, there lieth an lland before the haven, men may goe about it on both sides, it is deepe eight and nine fathome; but to the southwardes of the lland it is deepe 5, 6, and 7 fathome, according as men will come neere to the strand, the haven lieth in first westnorthwest. The lland lieth a great league within the bay: from the east point of the haven, unto the west point of the land, it is south and north about a great league. S. Anthonies and the west point of S. Andero, ly one from the other east and west about 5 leag.

For to know the land when you fall with the land about Laredo, you must know that on the west side of the haven of Laredo, lieth the hill of S. Anthonies, which is a very high hill, which men may see very farre from the east and the west, and a little above the towne of Laredo, men may see also a sharpe hill like the point of a Diamant, or the point of a two hand sword, further it is about Laredo very high double land, two, three, & at some places four double. The hill of S. Anthonies doth arise in two high hommocks, with a valley or sadle in the middest betwixt them both: within in the land ly also two high hills with sharpe tops. Above and to the westwardes of S. Anthonies, lieth a peece of land about two leagues long by judgment, which lieth in five hills, the eastermost is the lowest, and rise all higher and higher towards the west, so that at the last the westermost is the highest, which goeth off somewhat flat downward towards the west. Betwixt that eastermost hill and S. Anthonies, lieth a bay about a league long, called the Bay of Port, men cannot see these foresaid hills when they are close by the land, but they must be a good wayes off to seawards. To the westwardes of these foresaid hills lieth another peece of land, which at the east end is highest, and goeth sloping off towards the west end, almost like Portland. Betwixt that point & the five foresaid hills, lieth an other sandbay, whereabouts stand some little houses, but by it ly many rocks and fowle ground. Thereabouts within the land lieth the foresaid high round sharp hill in forme like the point of a sword.

S. Andero hath but few hills that are good to be known; but when men are before the haven, then they shall see to the eastwardes of the towne, a Castle upon a high hill, in forme



in forme like a Sugerloafe, or a hay-cock, and to the eastwards of it is much double land of two and three heights double. But when men come about the Cape de Kelgo, then they shall see presently the castle upon the west land.

From S. Andero to Cape de Pinas, the course is west or a little more northerly 38 or 39 leagues. Betwixt them both ly these havens following.

S. Martin. First the haven of S. Martin, or Settevilles, a tyde-haven lying east and west foure leagues from S. Andero.

S. Vincent. From thence to S. Vincent also a tyde-haven is five leagues distant: the haven goeth in on the east side; from the west side commeth shooting off a little riffe, and in the midst of the havens mouth lieth a little Iland, where men may goe in on both sides.

Lhanes. From S. Vincent to Lhanes, a tyde-haven, the course is west two or three leagues. Vpon the west side of the haven standeth a little church, and a little within the haven, lieth a middle plate or sand, men must go in on the west side of the sand: these are all narrow havens, & but little knowne.

Rio de Sella. From Lhanes to Rio de Sella, the course is west five or fixe leagues: betwixt them both ly alongst the coast many rockes, and within them many sand-bayes, where men for need might save ships.

He that will goe into Rio de Sella must look out for a mast which stands upon the east land, close by the same men must goe in, the west side is within, fowle, within the mast men must ancker before the village: this is also a tyde-haven.

From Rio de Sella to Villa Viciosa it is west nine leagues: this is also a tyde-haven, but is cleane; the havens mouth lieth in southsoutheast and southeast and by south close alongst by the west point of the land, the east side is fowle unto the middest of the haven: there lieth a rock with a plate right in the middest of the haven, which at low water fall dry: so soone as men are within that rock, they must ancker within the rock; upon the west side lieth the towne, men may also saile up to it, and ancker there in the shold water.

Seven leagues to the westwards of Villa Viciosa lieth the out-point of Sanfon: to the eastwards of it lieth a little Iland, whereupon standeth a little tower. Betwixt Sanfon and the foresaid little Iland is a good road in fixe or seven fathome.

At the west side of Sanfon is also a good road right before the little haven of Sanfon in fixe or seven fathome.

Gion. To the westwardes of Sanfon lieth Gion with a Piere or Head that is paled off, under the which the Fishermen which dwell there, lay their barkes.

A great league to the westwardes of Gion lieth the Bay of Tores, a good road for a southwest and west wind in Tores. eight and nine fathome. Vpon the point standeth a high tower.

Three leagues to the westwardes of Tores lieth Cape de C. de Pinas, where many rocks ly off to seawards, at least a halfe league off, some doe say that men may saile through betwixt the point and these rocks.

Of the tides and course of the streames.

ON all the places, and before all the havens of these coasts, a southwest and northeast moone maketh the highest water; but within the havens about a point later, according as they ly deepe within the land, like as on the coasts of Britaigne, Poictou, and Gascoigny. Men reckon here also no falling or setting of the streames. But the streames fall here thwart off and on.

How these lands lie one from the other, and from other lands.

THe courses and distances of these places one from the other, is declared in the description.

From Cape Martinchaco to Arcafon northeast easterly 28 leagues.

From Cape Martinchaco to Vse, north easterly 60 leagues.

From S. Andero to the Seames northnorthwest 96 leagues.

From Cape de Pinas to the Tower of Cordan eastnortheast and northeast and by east 72 leagues.

From Cape de Pinas to Porthus or S. Martins Iland, the course is northeast easterly 80 leagues.

From Cape de Pinas to Bell-Ile the course is northnorth-east 80 leagues.

From Cape de Pinas to the Seames north 88 leagues.

From Cape de Pinas to Cabo de Veilli in Ireland north and by west westerly 170 leagues.

Heights.

THe Cape Martinchaco lieth in 43 degrees, 46 or 48 minutes.

The Cape de Pinas lieth in 43 degrees, 54 or 56 minutes.

The whole coast of Biskaye betwixt Cape de Pinas and Martinchaco, lieth in about 43 degrees and 43, 44 or 45 minutes.

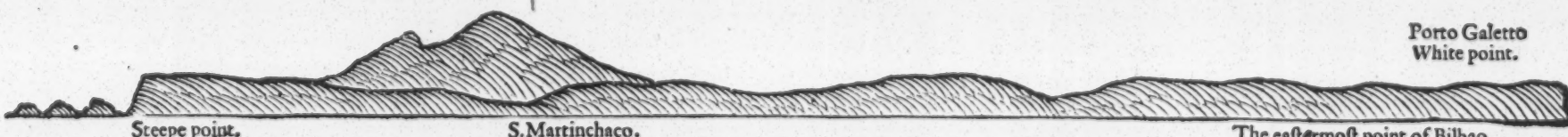
How these lands doe shew themselves at sea.



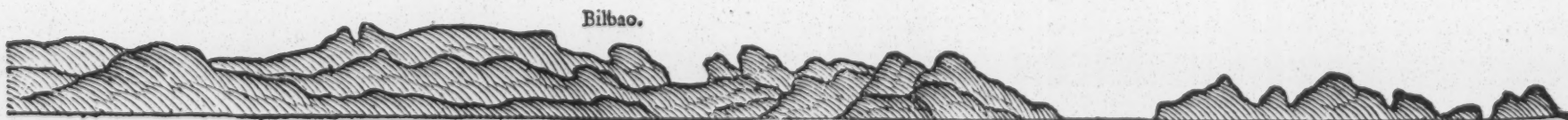
Thus sheweth the land to the eastwards of Bilbao, when men fall there with the land.



To the westwards of Bilbao towards Castro, men shall see a high sharpe hill, and sheweth thus towards Castro.



Thus sheweth the land betwixt the Cape Martinchaco and Bilbao.



Thus sheweth Bilbao and the land to the westwards of it, when you are thwart of it.



Thus sheweth the hill of S. Antonio lying at the west side of Laredo.



The hill of S. Antonio sheweth thus, when it lieth southsoutheast from you.

The



The land to the eastwards of Laredo, being south from you, sheweth thus with a sharpe hill.



The land betwixt the west point of Bilbao, and Cape de Kesgo to the westwards of Mount S. Antonio, sheweth at sea when you saile alongst by it, as is portrayed in these two figures here above.

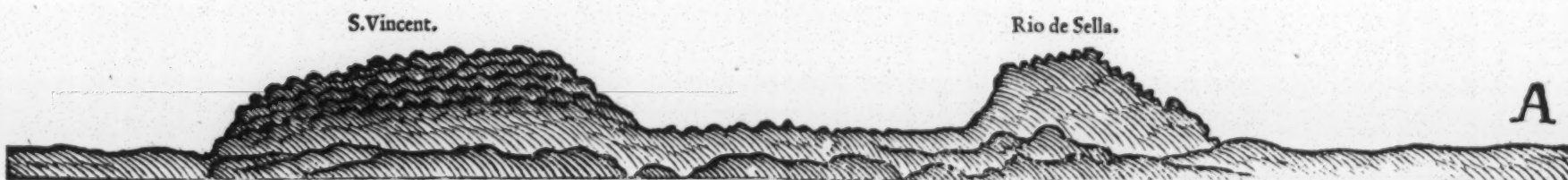


Thus sheweth the land of Biskaye betwixt Laredo and Rio de Sella, when you saile alongst by it.



Thus sheweth the land from Rio de Sella off, to Cabo de Pinas, when you saile alongst by it.

These foure figures following belong one to the other, the like letters as AA, BB, CC, one to the other, and is the coast from the eastwardes of S. Vincent to Cape de Pinas.



Thus sheweth the land from the eastwardes of S. Vincent untill past Rio de Sella, when the hill with the three hilles is foure leagues thwart from you, and Rio de Sella is foure leagues southwest from you.



Thus sheweth Cape Kesgo, Villa Viciosa, and the land to the westwardes of them, when Cape Kesgo is south foure leagues, and Villa Viciosa foure or five leagues southsouthwest from you.



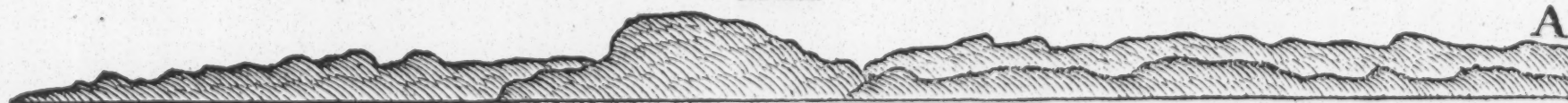
Thus sheweth the land of Biskaye, when you are thwart of Gion.



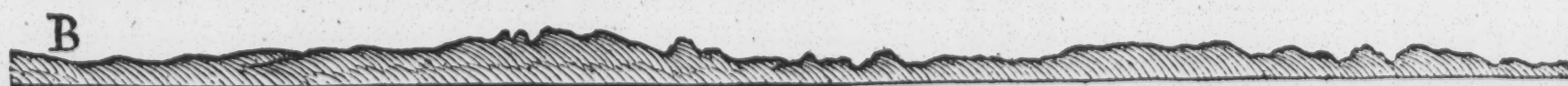
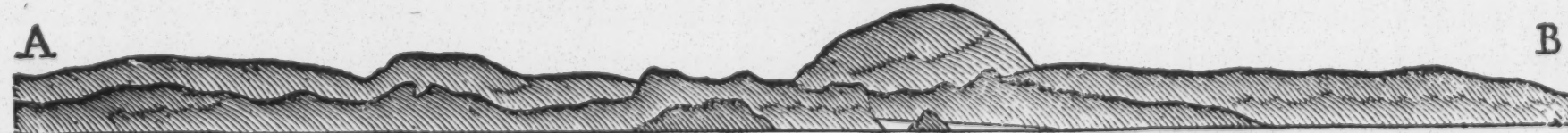
Thus sheweth the land when you are against Tores.

These three figures following belong one to the other, the like letters one to the other, and shew the rising of the land on both sides of the Cape de Pinas, to wit, when the Cape Pinas is about foure leagues south somewhat westerly, and the great hill to the eastwardes of it is southeast from you.

Southeast.



This hill lieth most commonly covered with snow.



C. Lillas.

C H A P. VIII.

The Coasts of Galicia betwixt the Cape de Pinas and the Cape de Ortegal.



Also a league at least into sea lieth off a rane of rockes from the Cape de Pinas, some say that men may sail through betwixt the point and these rockes. But a little within or to the westwardes of the Cape de Pinas lieth a great rock, betwixt that rock and the land men may saile through.

When men are within the Cape de Pinas, then lieth Avilles three leagues from thence southsouthwest, which is a good tyde-haven, where a great shippe may well goe in at halfe flood, also there is a good road before this haven in fixe and seven fathome.

Avilles.

For to saile in there men must goe in by the eastland, the westland is farre off shold, there standeth a little chappell upon the eastland, men must saile in close by it, and ancker a little waie within two rockes that ly on the east side, a little within the havens mouth. The towne lieth a league further up. From the west point runneth off a riffe, and lieth inwards alongst the haven, towards the towne, so that it is there very shold on both sides. On the west side without the haven in the bight, ly two great rockes right before the little Church in the Sand-bay, men may saile round about them, but it is not very cleane: but without the rockes is good ancker ground in seven or eight fathome, over against the little Church that standeth against the high land.

Luarca.

From Avilles to Luarca it is fixe leagues, and from Luarca to Ribadeus westsouthwest fixe leagues, and from Avilles to Ribadeus southwest and by west twelve leagues.

Ribadeus.

From the east point of the havens mouth of Ribadeus, lieth off a ledge or riffe of rockes towards the west shoare; you may found in about it in foure fathome, or foure fathome and a halfe: or else if you keepe the little towne Castropoll even without the point, and so saile right in with it, then you shall not come to neere the foresaid ledge, but you shall saile far enough alongst to the westwardes of it. The west point sheweth it selfe when you come in out of the sea, like an Iland; upon it at the north end standeth a flat tower, almost like the tower in the Groyn, but not so great. About thwart of that tower lieth a suncken rock a little waies from the land, you must look out for it, and take heed of it, when there commeth in any great sea, you can easily espye it by the breaking of the sea upon it, but not with smooth water: at the very lowest water it commeth even with the water. The west shoare is fowle and rocky, there runneth off to the southwardes of the foresaid tower also a fowle ledge or riffe of rockes, at least halfe waies over the havens mouth, and at the side of it you cannot use the lead. When you are past the ledge or riffe that lieth off from the east shoare, you must runne in about it, and edge in somewhat to the east shoare, and saile in alongst by it, untill that you are past, or come to the end of the foresaid ledge or riffe of rockes, which lieth off from the west shoare, as soone as you shall be past it, you must luffe up about it towards the west shoare, for to give the east shoare (within the havens mouth) a birth, which is a great wayes within very flat or shold, but on the west side it is deepe water. There standeth a little tower on the west shoare a little within the point, where the riffe lieth off, which you shall see when you are come within the west point, and runne

alongst by the riffe, when you get that little tower west or thwart of you, then are you at the end of the riffe, then you must saile towards that little tower, untill that you come to the west shoare, and runne in alongst by it, untill you come before the towne, there you must ly with an ancker to seawards, and with a cable fast on the rockes.

A little league to the westwardes of Ribadeus lieth a tyde-haven, he that commeth from the west alongst by the shoare, thwart of it, shold lightly thinke that to bee the haven of Ribadeus, but it is light to discerne from it by these marks following. On both sides of this tyde-haven are the coasts all high land, but on both sides of the havens mouth of Ribadeus, it is low land. Also there lieth a high sharpe hill, and very good to be knowne, which ariseth out above all other hills thereabouts, which may be knowne at least seven or eight leagues off, upon it ly some heapes of stones to see to like little houses, when that you have that hill southsouthwest from you, and saile in so right with it, then you shall fall with the land right before the havens mouth of Ribadeus.

Northwest from Ribadeus about eight leagues, lieth the Cabo de Brilo, a little to the westwardes of it lieth the little towne Viverus. To the westwardes of the Bay of Cipriaen (where me may ancker in ten fathome) ly two great high rockes: westnorthwest from these rockes about a halfe league lieth the Iland S. Cipriaen, right before the haven of Viverus, whereby this haven is good to be knowne: you may saile about on both sides of this Iland into the haven of Viverus, in all alongst in the middle of the channell south and south and by west untill you come before the towne, being within, you may ancker where you will either on the east or west side, it is there shold water of five, six, seven, and eight fathome, according as you runne farre in. From the haven of Viverus, or from the Iland S. Cipriaen to Cape de Ortegal, the course is westnorthwest nine leagues.

Betwixt both, a league to the westwardes of Viverus, lieth the little towne of S. Marcus with a Bay, there men may ancker in seven or eight fathome, and ride for a southsouthwest and west wind.

Two great leagues to the westwardes of S. Marcus lieth the river of Caryns, there is also good anckering, and from thence forth unto the Castle of Ortegal, all the coast alongst, it is there every where cleane. From Caryns to Ortegal the course is northwest five leagues.

Ortegal is a great point lying out, to the eastwardes of it men may ly landlockt for a northwest, west, southwest, and south wind, thwart of the castle is the best road, there men may ancker in eight or nine fathome. When men come from the east, Ortegal is good to bee knowne, they shall see the castle stand against the high land.

Of the tydes.

ON these coasts, as on the former, a southwest and northeast moone maketh high water.

Courses and distances.

FROM Cape de Pinas to Avilles southsouthwest 3 leag.
From Luarca to Ribadeus westsouthwest 6 leagues.
From Ribadeus to Cape de Brilo northwest 8 leagues.
From Cape de Pinas to Ribadeus southwest and by west 13 or 14 leagues.
From Cape de Pinas to Ortegal west and by north westerly 29 leagues.

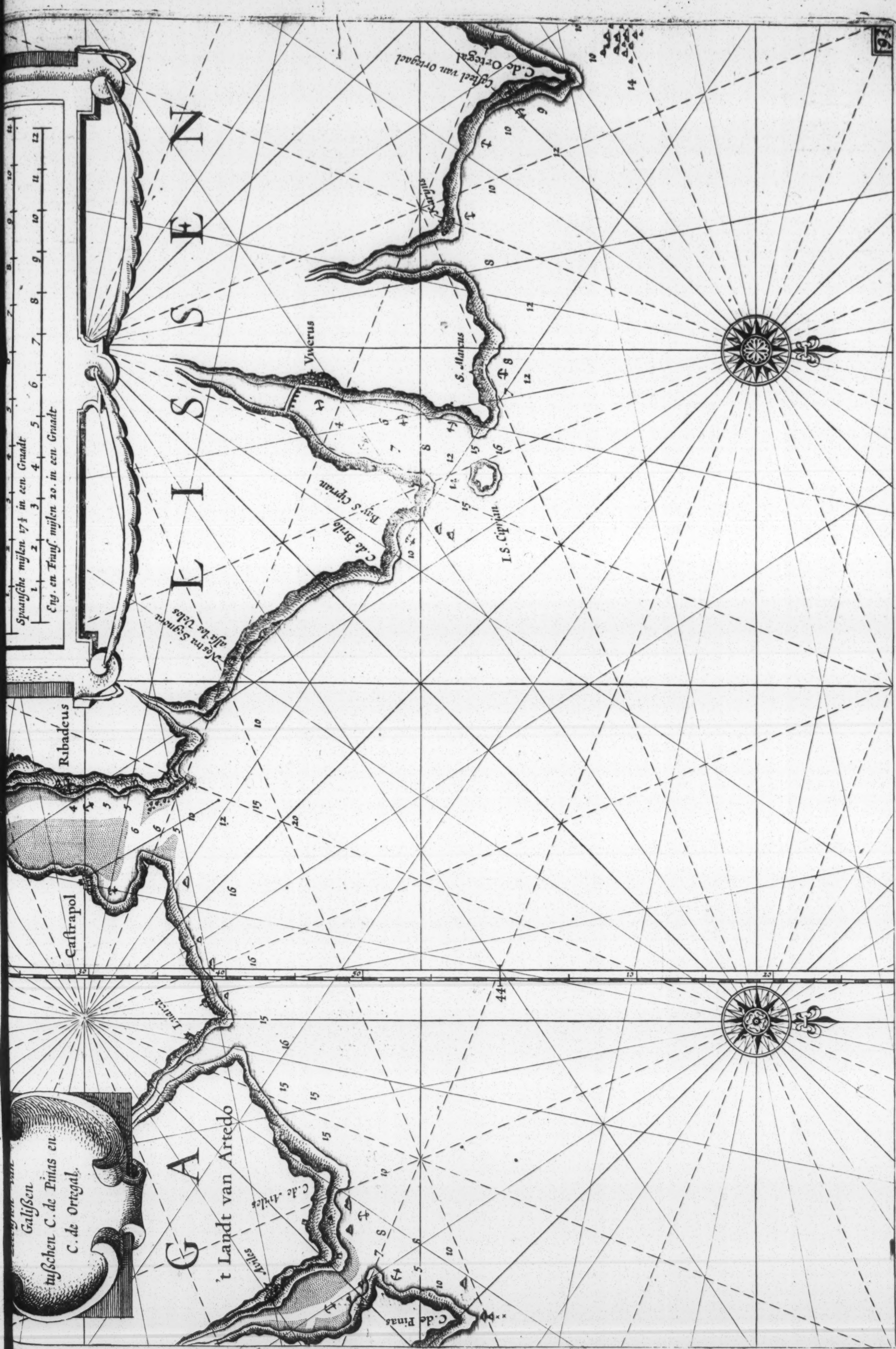
How these lands doe shew themselves at sea.



Thus sheweth the land of Avilles when you are thwart of it.

These

Spanische mijlen 17 1/2 in een Gradt
Galisen
tusschen C. de Pinas en



The Coasts of Galicia betwixt the Cape de Pinas and the Cape de Ortegall.

These three figures following belong one to the other, at the like letters one to the other and shew the rising of the land betwixt Cape de Pinas and Ribadeus, when you saile alongst close by the land.



Thus is the eastermost towards Cape de Pinas when the land against Z is south from you.



Thus sheweth that land against Z being south from you not farre off.



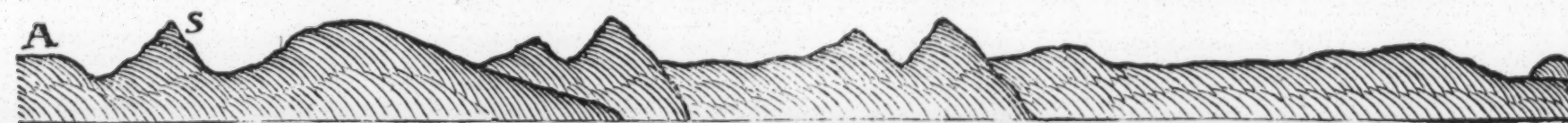
Ribadeus.

Thus sheweth the land betwixt Luarca and Ribadeus.

These two figures following belong one to the other at the AA together.

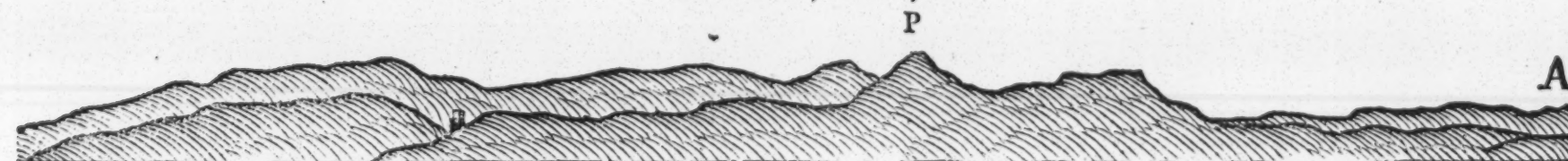


Thus sheweth Ribadeus when you are thwart of it about a halfe league from the shoare.



Thus sheweth the land to the westwards of Ribadeus when the hill by S is south from you, and followeth to the former figure.

These three figures following belong one to the other the AA and BB one to the other, and shew the rising of the land about Ribadeus, and to the westwardes of it.



Thus sheweth Ribadeus when the hill to the westwards of it, marked here with P is south and by east from you foure leagues.

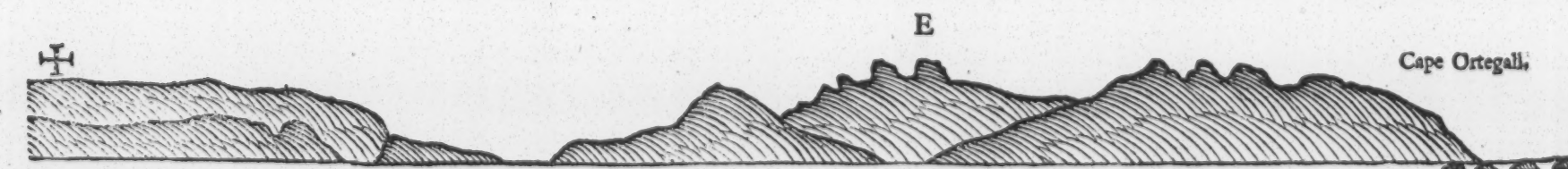
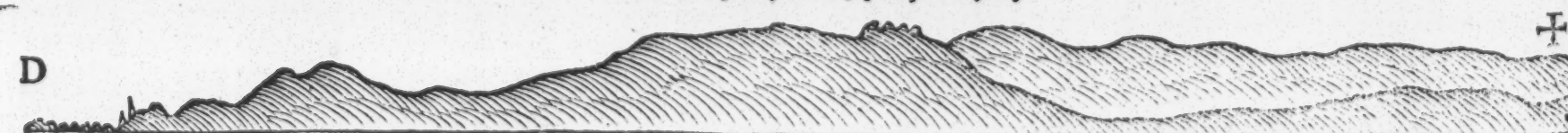


This belongeth to the former, the AA one to the other.



This followeth the two former figures to the westwards of Ribadeus, the BB one to the other.

These two figures following belong at the crosses one to the other, and shew the rising of the land a little to the eastwards of the Cape Ortegall, when the point marked with D, is five or six leagues east and by south, or eastsoutheast from you, and the hill marked with E is southsouthwest from you westerly.



The end of the fourth Booke.

The third part

F I F T H B O O K E

of the

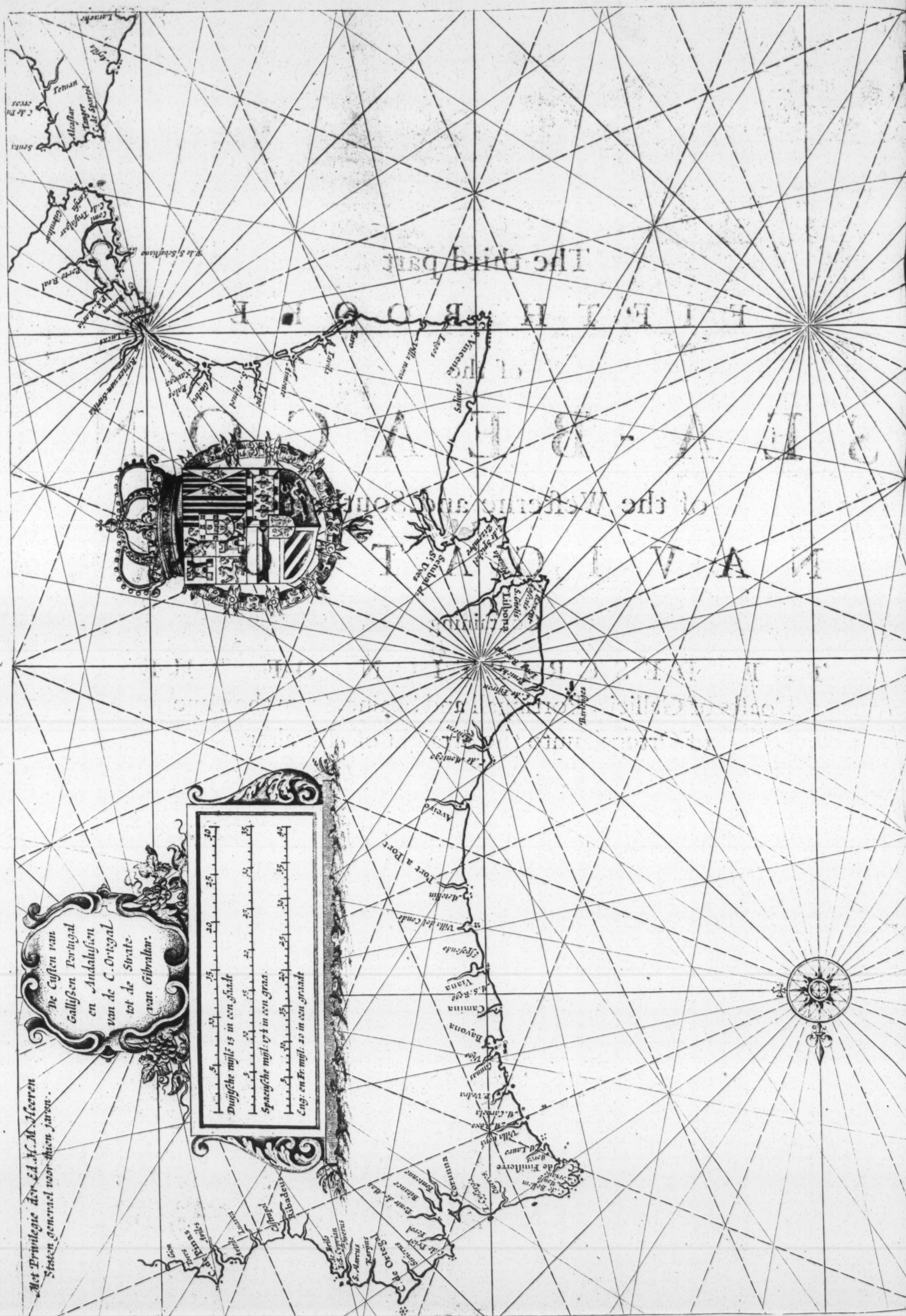
S E A - B E A C O N

of the Westernne and Southerne

N A V I G A T I O N,

Containing

T H E D E S C R I P T I O N O F T H E
Coasts of Gallicia, Portingall and Spaine, from the Cape
of Ortegall unto the Straight of Gibraltar.



Met Privilegie der E. d. H. M. Heeren
Staten generael voor tien jaren.

~~Staten generael voor thien jaren.~~

Gallijzen Portugal
en Andalusien
van de C. Ortelgal
tot de Strate.
van Gibraltar.

Duitche wille is in een Stadt

Speciſche mſl: 17½ in een gran.

Eng: en Fr: mjl: 20 in een graad

regall.

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Prior

11.

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wharves

unto sail
to the
royne.

THE FIFTH BOOKE

of the

WESTERNE

NAVIGATION,

Contayning the Description of the Coastes of Galicia, Portingall,
and Spain, from the cape Ortegall to the
Strait of Gibraltar.

C H A P. I.

From the Cape Ortegall to the Cape Finisterre.

NOrthnorthwest about a league into sea from the Cape de Ortegall, lieth a great rane of rockes: betwixt them and the foresaid Cape men may saile through in ten fathome.

From the Cape Ortegall to the Cape Prior, the course is southwest ten leagues: betwixt them both lieth a Towne called Sedeira, by the Dutch Skippers called Siverus, which hath a deepe haven lying in southeast. The north side of the haven is rocky and fowle, which you must avoid, and runne close in by the westland, which is a high land; alongst by it, it is twelve fathome deepe, within the havens mouth it is ten fathome deepe, you may saile in untill you come before the towne, and ancker there in fixe or seven fathome.

Five leagues to the westwards of Sedeira lieth the Cape de Prior, which is a very ragged hill, to see to a far off, as if it were full of people.

Three leagues from the Cape de Prior, lieth the haven of Feroll: betwixt them both ly two little sand-bayes, the southermost (wherein stand some little white houses) is the greatest, and lieth a little to the northwardes of the north point of Feroll; when you come neere the Bay, the haven beginneth to open it selfe, it lieth eastnortheast and east and by north in, amids the channell betwixt two high lands: when you come in, you must presently edge up to the northwardes by the north point and ancker there a little to the westwardes of the village Feroll, before the village it is flat and rocky ground.

When you come from the west, or from the Groyne, and will saile into the haven of Feroll, then goe away from the little Iland S. Blasius north, and north and by west, and runne a good wayes about, without the south point of Feroll (which is very fowle and rocky) untill that you see the haven open; goe then yet so farre to the northwardes of the south point, untill that the haven doe shut againe, and run then right in with the foresaid greatest sandbay, wherein stand the two or three little white houses to the northwardes of the haven, untill that you be within the south point, and the fowle grounds which ly off from it; saile then right to the north point of the haven, and alongst by it towards the south side, untill that the haven doe open it selfe againe, and runne then (as before) alongst in the midst of the channell. This haven is so narrow in the comming in, that you may cast a stone upon the land on both sides, and in that narrow it is twenty fathome deepe. When you are in the havens mouth, you may see through betwixt the Iland Sifarga, and the maine land to the southwardes of it.

To saile from Feroll to the Groyne, the course is south, and south and by west three leagues, when you come neere the west land, you must give it a birth, at least of foure or five cables lengths, because it is not very cleane. When you come by the point where the Castle standeth on, you

West. Water. v. Booke.

shall see then also a little Iland with a little house upon it, you may saile alongst by it within a halfe cables length, and runne about by it, up to the westwardes, untill you come before the Fishers village, and ancker there in fixe, seven, or eight fathome.

From Cape de Prior to the Groyne, the course is south, and south and by west five leagues.

Eastnortheast from the foresaid Iland where the Castle standeth upon, goeth in a Sound southeast five or fixe leagues within the land, to Bitanze, wherein you may ancker on the west side under a row of rockes, in tenne or twelve fathome, also you may saile so deepe in, that you can see no sea.

To the northwardes of that Sound, over against the point of the Groyne, lieth also an other haven or Sound called the Mas, on the north side lieth a row of rockes, where men run alongst to the southwardes of them: men may also saile there so deepe in, that they can see no sea. A good wayes within lieth a great bridge over the river.

He that commeth from the west off from the Iland Sifarga, and is bound into the Groyne, must give the north point, or the west point of the Groyne (where the tower standeth) a birth of foure or five cables lengths, as before is said, which point is rocky and fowle farre from the shoare, and runne then eastsoutheast, and southeast about by the point, and afterwards southsoutheast unto the little Iland with the Castle, and about by it, as is before said.

The little Iland Sifarga, of the Dutchmen called Cesarie, is fowle round about, & lieth from the point of the Groyne, due east and west distant seven or eight leagues, from the haven of Feroll west & by south, from the Cape Prior west-southwest, & southwest & by west, and from the Cape de Ortegall southwest, & southwest & by west 17 or 18 leagues.

From the Iland Sifarga south and by west, and southwest lieth Queres, a good haven also for great ships, the west shoare is cleane, but the east shoare is fowle, therefore men must saile in alongst by the west shoare, when they are betwixt the two lands, then they must goe in amids the channell, unto the point, and then run up to the westwardes a great halfe league in, and ancker there in seven, eight, and nine fathome.

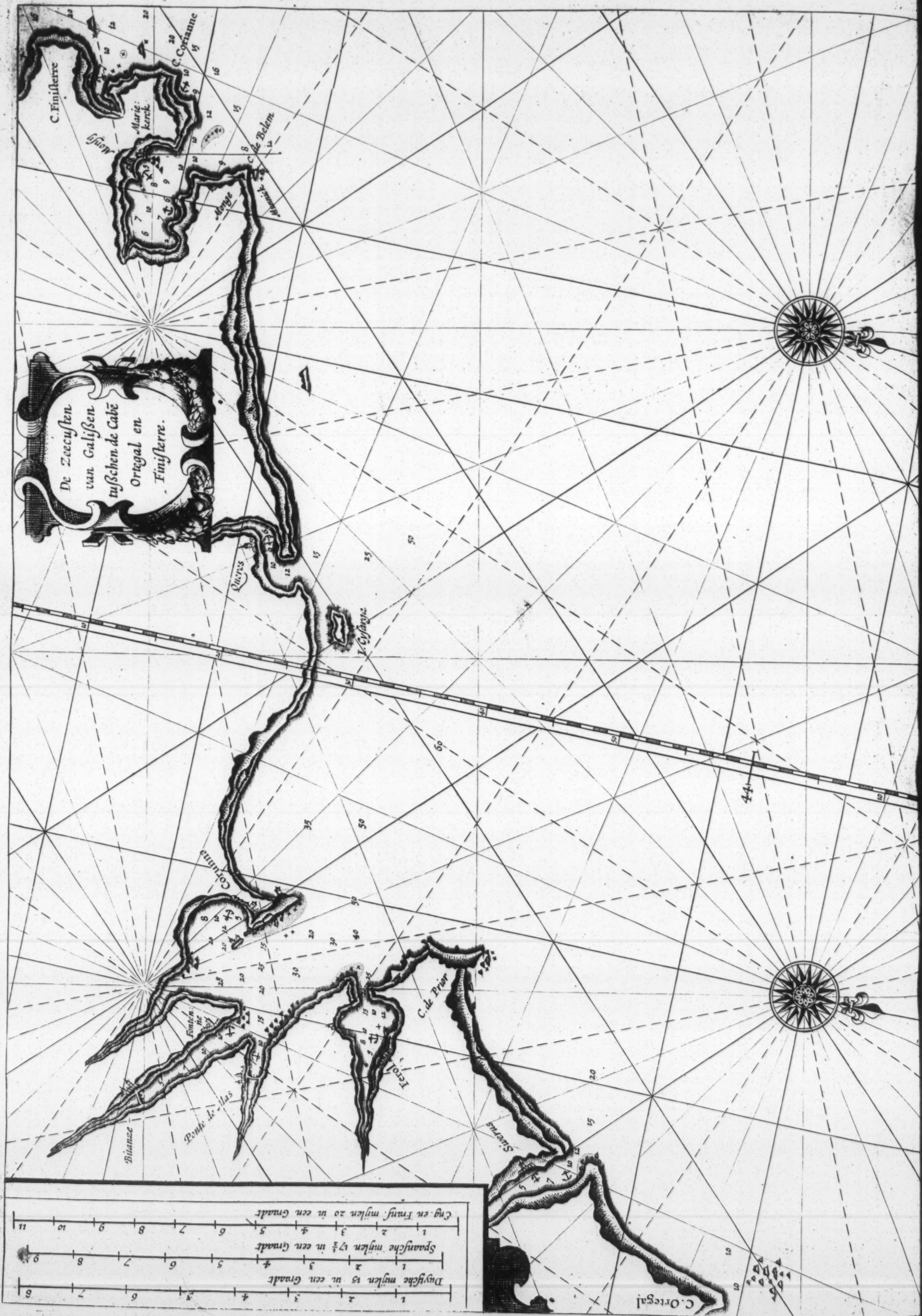
From the Iland Sifarga southwest and by west, and west-southwest twelve or thirteene leagues, lieth the east point of Monsie, called Cabo de Bylem, which is a high steepe point, with many ragged rockes lying off loose from the land, whereof the greatest, being like a tower, doth shew it selfe black, and is called the Munck.

There lieth also a great rane of rockes right before the haven or sound of Monsie, southwest and by south from the Munck, at least two or three cables lengths long, but the innermost end of it lieth from the Monck south & by west. When men fall with the land of Monsie, it is all double land; about the Cape de Finisterre lieth a high white sand, lying in within the land like a sand-bay.

Also men shall see comming about the Cape de Finisterre, a ragged hill which runneth alongst so farre to the southwardes, that men may see it before the Moores.

Q

He



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Spauiſche mylen 17½ in een Gradt
Eng. en Fruiſ. mylen 20 in een Gradt

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He that is bound in for Monfy, coming from Cisarga, must goe in close alongst by the Cape de Bylem, or Bellem: this point is altogether a ragged high sharpe land of steepe rockes, as before is said, and when you are by that point, then you must keepe the Cape de Coriane a ships length without the Cape de Kote, so long untill that the Church of S. Maria come without the point of Monfy; runne then in at the easter channell southsoutheast upon these marks, untill you be past the Church, then you shall see a row of rockes, runne in behind or within them, and ancker there before the village of Monfy in five, fixe or seven fathome.

When you saile thus from the Cape de Bylem to Monfy, then the rockes (which ly in the middest before the haven) remaine about an English mile to seawards on the west side of you.

For to saile in at the wester channell, you must go in east-southeast indifferent neere alongst by the land, and when the foresaid Ladies church commeth without the point, then you must saile towards the rockes, which ly before Monfy, as is before said, and ancker within the rockes in seven or eight fathome, but runne not to farre in, because there shooteth off a shold riffe alongst the haven, whereof you must take heed.

The easter channell is better to come into, then the wester channell: saile not into Monfy before that you see the foresaid Church, without the point, you may also ancker on the north side of the haven in five, fixe or seven fathome.

To the southwards of the village of Monfy is a Bay where the foresaid riffe or shold lieth before, lying eastnortheast at least two cables lengths alongst the haven.

Our Ladies Church & the Munck ly one from the other north and by east, and south and by west.

Southwest from the Cape de Bellem three leagues lieth the Cape de Coriane.

From Cape de Coriane it is south and north three leagues to Cape de Finisterre: betwixt the two Capes is a sand-bay, where men may ancker to the eastwards of a great rock in fixe or seven fathome. This is a great Bay which goeth in farre into the land. At the north side of this bay ly rockes under water, whereof men must take heed.

Of the tydes.

Southwest and northeast Moone maketh full sea at these foresaid places, on the sea coast, and within the havens a point later.

How these lands doe lie one from the other, and from other lands.

From Cape Ortegal to Siverus the course is southwest 5 leagues.

From Siverus to Cape de Prior southwest 5 leagues.

From Cape de Prior to Feroll south and by east 3 leagues.

From Feroll to the Groyne south, and south and by west 3 leagues.

From the Groyne to Cisarga west 8 leagues.

From Cisarga to Queres south & by west, and southsouth-west 2 leagues.

From Cisarga to Cape de Bylem, or the east point of Monfy, southwest and by west, and westsouthwest 12 or 13 leagues.

From Cape de Bylem to Cape de Coriane, or Torrvian southwest 3 leagues.

From Cape de Coriane to Cape de Finisterre south 3 leag.

From Cape de Ortegal to Cape de Prior s. w. 10 leagues.

From Cape de Ortegal to Cisarga southwest, and south-west and by west 19 leagues.

From Cape de Prior to Cisarga southwest and by w. 9 leag.

From Feroll to Cisarga west and by south 8 leagues.

From Cape de Ortegal to Cape de Coriane southwest and by west 33 leagues.

From Cape de Ortegal to waterford in Ireland north 168 leagues.

From Cisarga to Cape Veio north 160 leagnes.

From Cisarga to Silly north and by east 137 leagues.

Heights.

Cape de Ortegal lieth in 44 degr. 5 min.
Cape de Coriane in 43 degr. 8 min.

How these lands doe shew themselves at sea.

Thus sheweth Ortegal when it lieth southeast and by south from you.

When Ortegal is southeast from you, it sheweth it selfe thus.

Thus ariseth Ortegal when the eastermost hill lieth southsoutheast from you, and that you may see the east end with cleare sight, being eight, nine, or ten leagues off at sea.

C. Ortegal.



These two figures belong at the double crosses one to the other, and shew the Cape Ortegal with the land to the westwards of it, when the foresaid Cape is east and by south five or six leagues from you.

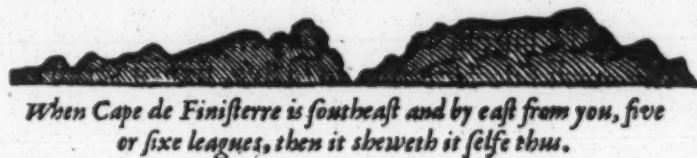
The land to the eastwards of the Groyne sheweth thus, when it is south and by east from you.

Cape Prior, the east point of the Groyne ariseth in this forme.

Cape Prior being southwest from you sixe or seven leagues, sheweth it selfe thus.

Q 2

Cape



How the foresaid Cape ariseth being more easterly and northerly from you, you may see in the Chapter following.

C H A P. II.

The Coastes of Galicia from the Cape Finisterre to Camina.

Seche.

Corck
Bayone.



O the eastwards of Cape de Finisterre on the south side about a league, lieth the haven of Seche or Corcovia, and is called by the Dutch Shippemasters Corck Bayone. Betwixt this haven and the Cape ly two sand-bayes, the first, or that which is next unto the Cape, is the greatest, and by the second goeth in this haven north, in eight and nine fathome. On the east side of the haven lieth a great rocke, and about southsouthwest off from that rock, almost in the midst of the haven, lieth a suncken rock under water: but runne in north untill you espy the towne on the west side, and ancker there in sixe or seven fathome. Within upon the river lieth also a Village, or little Towne, about northnortheast from you.

Moores.

From Cape de Finisterre to the haven of Moors, the course is southeast five great leagues, when you come about the Cape de Finisterre, you shall see a high ragged hill which runneth so farre to the southwards, that you may see it also before Moores, that is a good marck for to know the land by thereabouts.

When the foresaid ragged hill is northeast from you, then are you thwart of Cape de Finisterre, and then the hill Monte Lauro, which lieth upon the northeast point of Moores, lieth eastnortheast from you, that is a high cloven hill which is also good to know.

Southeast three little leagues from the Cape de Finisterre, lieth a rane of rockes under water, and eastsoutheast about two leagues from these rockes, ly also some rockes above water, a little to the northwards of Monte Lauro, or the Sound of Moores, and ly from Monte Lauro west and by south. Also there ly a deale of rocks to the southwards of this Sound of Moores, and right in the midst of the Sound lieth also a suncken rock, about southeast off from Monte Lauro.

For to saile
into Moors

He that will saile into Moores, he must bring Monte Lauro northeast and by north of him, and saile in so right with it, and then he shall not come too neere the fowle grounds or dangers: when he commeth then by Monte

Lauro, he shall see the foresaid rockes lying out to the northwards of Monte Lauro, he must leave them as also the point of Monte Lauro two or three cables lengths on the larboard side of him, and saile in so alongst by them, untill that he come past the second point, leaving the suncken rock (which lieth in the midst of the Sound) on the starboard side of him: and when the fishers village which stands to the northwards of Monte Lauro, commeth to stand altogether bare, then he is within the suncken rock which lieth in the midst of the Sound, south and by east easterly from the east end of the foresaid Fishers village.

When you come by the second point, you must runne in about it within a cables length, and edge up to the northwards untill you come before the village, or up to the westwards before the towne, where you please, and ancker there in twelve or thirteene fathome.

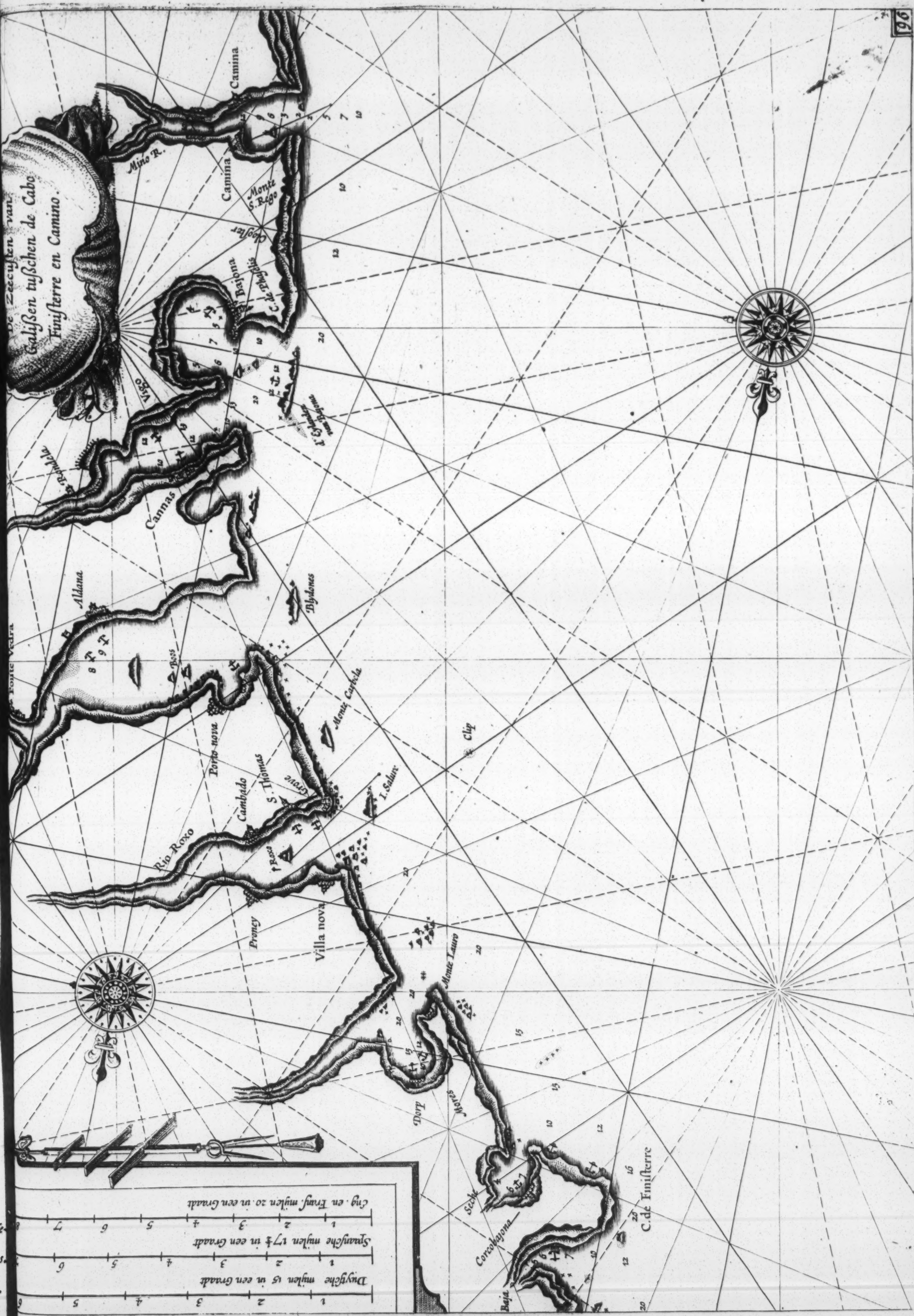
If you will saile into Rio Roxo, then runne about without the rockes which ly to the southwards of the Moores, and goe in southeast and by south, untill that you come before the haven of Rio Rosso, or Roxo, then you shall see a great many of rockes lying off from the northland, almost unto a great rock or Iland called Salure: betwixt these rockes that ly out there, and the Iland Salure, you may well runne through about to the northwards of the Iland, but it is very narrow, by reason of the a foresaid rockes, which ly off from the north land, therefore saile about to the southwards of the same Iland, indifferent close alongst by it, leaving it on the larboard side, or to seawards of you, untill that you see the Sound open, and then runne in keeping the middle of the channell, unto that Iland Roxo, which you shall see ly in the midst of the haven, when you come neere it, you may ancker under the southland, there are two Sandbayes, where is good ancker ground.

About two leagues southwest from Rio Roxo lieth a suncken rock, Iohn Claes Bors of Sardam, did saile upon it, and there lost his shippe the twenty of February 1613, in the night.

From Rio Roxo, or the Iland Salure, unto Ponte Vedra, or the Iland Blydones, the course is southsoutheast foure leagues, betwixt them both lieth an Iland called Monte Carbela; within it, it is three fathome deepe. Right before the haven of Ponte Vedra lieth the Iland Blydones, which men may saile round about. On the north side it is not deeper

Ponte Ve-
dra.
Blydones.
Monte
Carbela.

De Zeeuyfen van
Galiffen tuffchen de Cabo
Finifterre en Canino.



Duyghe mylen 15 in een Grada
Spanfche mylen 17½ in een Grada
Eng. en Frayf. mylen 20 in een Grada

deeper then five or fixe fathome: there ly also within the Sound, on the north side two rockes called the Boos, or Oxen. On the south side of Blydones in the right fareway for to saile into Ponte Vedra, this haven lieth in northeast untill within the Iland; somewhat further in, in the midst of the haven lieth also another little Iland, which you must also goe to the southwards of, therefore goe in eastnortheast alongst by the southland, untill that you see the flat tower which standeth upon the southland, and then you must run over a banck, right on with the point of Ponte Vedra, within it lieth the towne, thwart of the flat tower men may anker in eight or nine fathome: this haven is at some places fourty fathome deepe.

Ilands of Bayone.

Five leagues to the southwards of the Ilands of Blydones, ly the Ilands of Bayone, when men come in out of the sea right with them, then these Ilands do seeme to be all gray and black rockes, and ly to see to as if they were three Ilands, although that the sea do runne through them but at one place, betwixt each is a saddle, or valley.

Within the land alongst over these Ilands, men shall see two high hills very good to bee known, the eastermost hath three high hommocks, and the westermost two; with valleys betwixt the hommocks; a little to the eastwards of the eastermost hill men shal see a white Abbey stand against the high land, whereby this land is very good to be knowne.

For to saile into Bayone from the northwards.

You may saile within these Ilands of Bayone either to the northwards or to the southwards, but at the northeast point of the Ilands lieth a rock under water, about a cables length off from them, whereof you must take heed, and anker in tenne, eleven, or twelve fathome on the east side of the Ilands.

Vigo. Cannas.

He that will saile in to the northwards, must runne in betwixt the Ilands and the maine land, keeping neere about the middle of the channell, but neere to the Ilands, untill that the Sound of Vigo, or Cannas bee open, and then saile in to the eastwards, there is a broad Sound, where men may anker on both sides, to wit, on the south side before Vigo, and on the north side before Cannas in twelve or thirteene fathome.

Also men may saile further in about the south point of Rondella, where men may save a shippe in the roaze, without anker or cable.

At the point of Vigo lieth a little Iland, he that commeth in to the northwards of the Ilands, & is bound in for Bayone, may saile through betwixt that little Iland and the point of Vigo, right in with Bayone, to wit, alongst a little to the westwards of the point, untill hee come before the towne, and anker there in foure, five, or fixe fathome.

Betwixt that foresaid little Iland, and the point of Vigo, it is at high water foure fathome and a halfe, and at low water three fathome and a halfe deepe, men must (sailing through there) give the point of Vigo a birth, because of some suncken rocks that ly off from it. When that men ly in the road before Bayone, in five or six fathome, they may see the Ilands of Blydones through betwixt the foresaid point of Vigo, and that little Iland.

From that same little Iland lieth to the westwards another little Iland or rocke, betwixt them both it is fowle, so that men cannot saile through betwixt them, and from that westermost little Iland lieth a fowle riffe or ledge of rockes, southwest off towards the point of the land of Bayone, whereof men must take very good heed, whether you come from the northwardes, and will saile through betwixt that riffe and the Ilands of Bayone, or els come in from the southwards, betwixt the Ilands and the maine, and will goe in for Bayone.

That riffe lieth at low water at many places dry, the outermost rockes thereof, and the point of Bayone, where the Castle standeth upon, ly southeast and southeast and by east, and northwest and northwest and by west an English mile asunder, therefore he that commeth from the northwards, and will goe into Bayone to the westwards of that riffe, that is, betwixt the riffe and the Ilands, let him goe so long to the southwards, untill that the Castle of Bayone come to be eastsoutheast and east and by south from him,

and saile then towards it, and then he shall run farre enough alongst to the southwards of it.

At the south end of the Ilands of Bayone, lieth a great rock, with a deale of small rockes round about it, men may saile very close alongst by them, but at high water the outermost rocks ly under water, whereof men must be mindfull, close by the rocks it is twenty, five and twenty, and six and twenty fathome deepe. From the point of the maine land over against the south end of the Ilands, runneth off a ledge of rocks, whereupon it breaketh very much, when the sea is growne, whereof also men must take heed.

When you come from the southwards, or out of the sea, and will saile in for Bayone, about to the southwards of the Ilands with a southerly or southwest wind, then runne right with the south point of the outermost land of Bayone, untill you come neere about a halfe league off the land, and then alongst by the shoare, unto the outer point on the south side of the comming into the Bay, where that foresaid riffe runneth off, which lieth off low, give that riffe a birth, and run in betwixt it and the foresaid rockes at the south end of the Ilands, northeast, or eastnortheast in, according as you shall come in out of the sea, leaving the riffe on starboard, and the rockes with the Ilands on the larboard side, untill that you come to the end, or to the northwards of the riffe; the north end, or the outermost point of that riffe at the south point, and the point of Bayone where the castle standeth upon, ly nearest east and by north, and west and by south a little league asunder. When as then you have the foresaid riffe (on the south side) upon your broad side, or els are to the northwardes of it, and that the castle doe stand east or thereabouts from you, goe then right in with the castle, leaving that foresaid other riffe (which lieth off southwest from the little Ilands at the point of Vigo) on the larboard side of you. If you bring the point of the castle, not to the southwardes of eastsoutheast then you cannot take any hurt of the northermost riffe.

The outer rockes of that northermost riffe, (which shooteth off from the two foresaid little Ilands) and the riffe which shooteth off from the south point of the land of Bayone, where men must saile through betwixt, ly one from the other southwest, and southwest and by south, and northeast and northeast and by north about an English mile asunder. When you come neere the Castle, then come not very neere the shoare, which is not very cleane, and when as then you come thwart of the innermost point of the castle, before that you begin to see the towne of Bayone, from behind the point, you must looke well out before you: for from that same innermost point, and from the castle, there lieth off a suncken rock, about halfe a cables length from the foresaid point, whereupon remaineth at low water no more then nine or ten foot water, keepe therefore (thwart of it) somewhat off from the point. When as you begin to see the towne of Bayone, then luffe up suddenly south, and saile before the towne, and anker there in five or six fathome, where you please, or els that the point of the Castle come against the westermost Iland of the two which ly off from the north point of the Bay, or point of Vigo, there it is good easie ground that holdeth well, set you anckers when you morre, northwest and southeast, the best anker to the southeast; from thence over the high land you shall have commonly the hardest windes.

If you must turne to and againe into the bay, then take very good heed, when you runne off from the Castle, that you runne not to far over southsoutheast; right before the towne, southeast and by east, and eastsoutheast from the road about a musket shot, lieth another suncken rock, which at low water is even uncovered, it lieth a small cables length off from a little point in the south point of the Bay, whereupon standeth a little house, to see to a farre off like a great green rock; you must be very carefull of it, especially when you runne over towards the southsoutheast.

But he that is bound into Vigo or Cannas, to the southwards of the Ilands, shall saile in betwixt that southermost Iland and the point of the land of Bayone, all alongst in the

For to saile into Vigo or Cannas from the southwards.

the middle of the channell, northeast, or northeast and by north in, at least two great leagues, keeping the norther haven two ships lengths open, so long untill Cannas come to the north land without the point of Vigo: and then he must leave the point of Vigo on the starboard side of him, and runne in (keeping the middle of the channell) betwixt the northland and the towne Vigo, and ancker there either before Cannas or Vigo, where hee pleaseth in ten or twelve fathome.

S. Rego.

A little to the northwardes of Camina, lieth on the coast a high steepe hill, above in the top with a clift or saddle, being called S. Rego, it is almost of fashion like Monte Lauro, but at least once so high againe, this hill is a very good mark for to know the places thereabouts. About halfe waies betwixt this hill and Bayone, lieth an Abbey upon the side of the land, that is also a good mark for to know Bayone for him that commeth from the southwardes, but the chieftest markes are the two foresaid high hills within Bayone, the one with two, the other with three hommocks. When that with the three valleys or saddles is eastsoutheast from you, run in then right with it, you shall not faile to fall with the land, right with the Ilands.

Camina.

Five leagues to the southwardes of the Ilands of Bayone, lieth the haven of Camina, a bard haven, where you must go in (with great ships) at the highest water. In the havens mouth, which lieth in northeast and by east, lieth a rock neereft the south side, close to the northwardes of this rock, is the deepest water, for to faile in or out. Within in the haven, on the north side, lieth a little Iland, and upon it standeth a little tower, you must keepe that over the tower which standes upon the north land, and so must run in right with them.

In this havens mouth is at halfe flood two fathome water.

At the north side of the haven it is altogether shold water, and very rocky and fowle: there shooteth off a ledge of rocks, or riffe, whereof men must take good heed.

Of the tydes.

A Northeast & southwest moone maketh on these Coasts full sea, like as on all the coasts lying on the great sea, there goe also no streames alongst the land, because

(through the swelling of the Ocean sea) the flood commeth right on against the coasts, and falleth right in and out at the havens.

How these lands ly one from the other, and from other lands.

From Cape de Finisterre to Moores, or Monte Lauro southeast 5 leagues.
From Rio Roxo to Ponte Vedra southsouthwest 4 leagues.
From Ponte Vedra, or Blydenes to the Ilands of Bayone southsoutheast 5 leagues.
From Bayone to Camina south and east 4 leagues.
From Cape de Finisterre to the Ilands of Bayone, the cours is southeast and by south 18 leagues.
From Cape de Finisterre to Port a Port southsoutheast 44 leagues.
From Cape de Finisterre to Avero south & by east 53 leag.
From Cape de Finisterre to the Burlings south 67 leagues.
From Cape de Finisterre to the great Canaries southsouthwest southerly 307 leagues.
From Cape de Finisterre to the Salvages s.f.w. 273 leag.
From Cape de Finisterre to the Ile of Madera southwest & by west southerly 197 leagues.
From Cape de Finisterre to the Ile Tercera westsouthwest and west and by south 278 leagues.
From Cape de Finisterre to the southwest point of Ireland north and by west, and north 173 leagues.
From Cape de Finisterre to Cape de Claro north 173 leag.
From Cape de Finisterre to Waterford, or the southeast point of Ireland north and by east 185 or 186 leagues.
From Cape de Finisterre to the Lizart n. n. e. 153 leagues.
From Cape de Finisterre to the Seams northeast and by north northerly 112 leagues.
From Cape de Finisterre to Bell-Ile northeast 122 leagues.
From Avero the Burlings southwest 20 leagues.
From Bayone to the Burlings south and by west 49 leagues.

Heights.

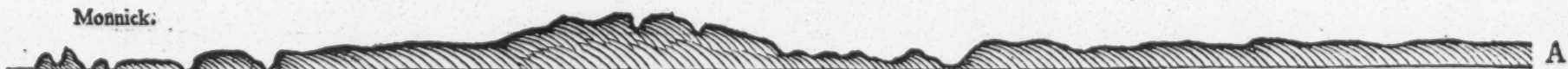
The Cape de Finisterre lieth in 43 degrees.
Bayone lieth in 42 degrees. 10 minutes.

How these lands doe shew themselves at sea.

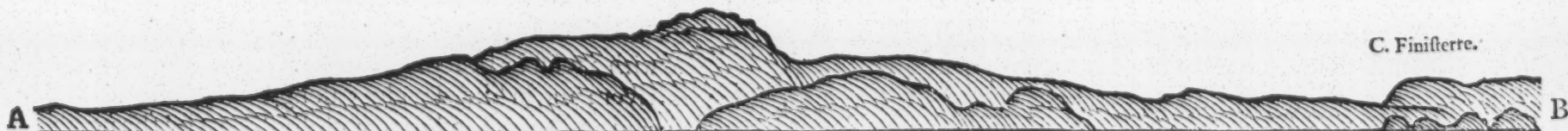


Thus doth Cape de Finisterre shew it selfe, when it lieth five or sixe leagues east and by south from you.

Monnick.



These three figures following belong one to the other at the letter A A and B B, and shew the rising of the Capes de Coriane and Finisterre, as is shewed in the description here under following.



The Cape de Finisterre sheweth it selfe with the land to the southwardes of it, as is portrayed in this and the figure following, when the ragged hill standeth east from you three or foure leagues, and then you shall see the land to the northwardes of it, unto C. Coriane, northeast, unto past C. Coriane, in forme as in the figure before this.



This followeth the former, and lieth from the Cape off southeast and by south.



Thus sheweth the Cape de Finisterre, when the ragged hill lieth eastnortheast easterly from you, and then the land of Moores lieth from you eastnortheast, as is here following demonstrated.



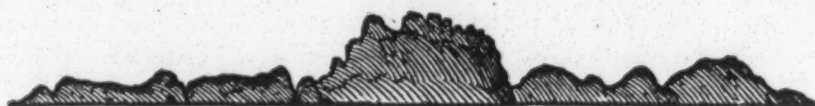
Thus sheweth the ragged hill of the cape de Finisterre when it lieth northeast and by north from you.

Cape de Finisterre.

The land of Moores.



When the cape de Finisterre lieth northeast from you, and the land of Moores eastnortheast six leagues from you, then lieth the cape in three parts, and the land of Moores thus.



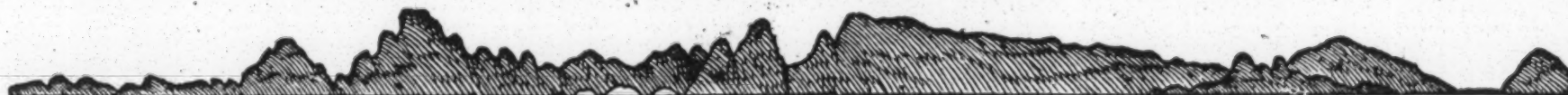
When the ragged hill betwixt the cape de Finisterre, and Moores lieth east and by north from you six leagues off, then it sheweth thus.



When the high land of Moores is northeast and by north from you about six leagues, then it riseth in this forme.

Monte Lauro.

The high land of Moores.



When cape de Finisterre is northeast or northnortheast, and Monte Lauro is eastnortheast five leagues from you, the high land of Moores sheweth it selfe thus.



Ilands of Bayone.

Thus shew themselves the Ilands of Bayone, and the high land to the southwards of them, when the foresaid Ilands are eastsoutheast a league or two from you.

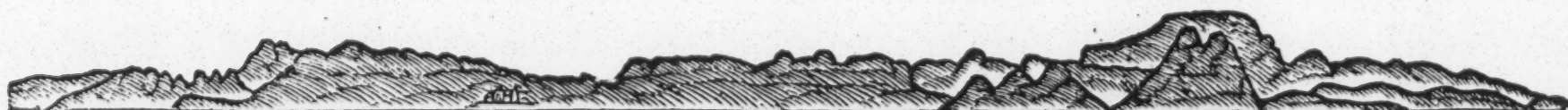
Bayone.

Abbey.

S. Rego.



When the point of Bayone is eastnortheast and the high land is east from you, then it riseth thus, to the southwards of it lieth the high hill S. Rego.



Bayone.

Abbey.

S. Rego.

When the high hill S. Rego is east from you, then the high land of Bayone sheweth it selfe thus. The Abbey standeth about halfe wayes betwixt S. Rego and Bayone.

C H A P. I I I.

The Coastes of Portingall from Camina to Avero.

Viana.



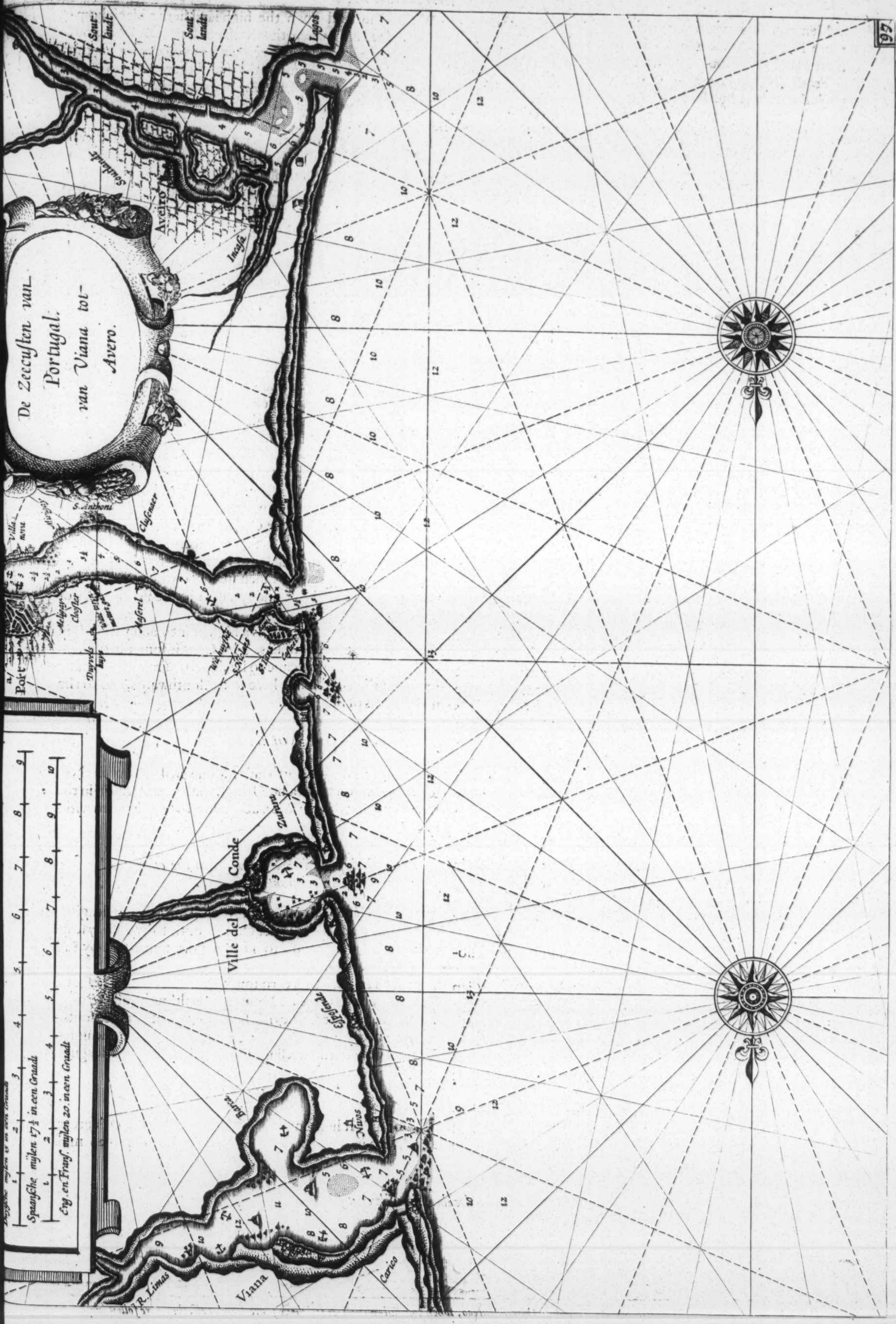
Even leagues to the southwards of Camina lieth Viana upon a river. From the north point lieth off a ledge of rockes thwart over before the mouth of the river, and upon the south shoare, stand two Firetowers. If you will saile into this river of Viana comming from the northwards, or out of the sea, then runne so long to the southwards untill that the two foresaid Firetowers upon the south side of the rivers mouth, come one in the other, and then run in right with them towards the strand, untill that the little tower upon the north land come over the two houses; keepe them one in the other, and run then to the rock with the mast, and saile alongst close to the eastwardes of it, and then you run in alongst over the Barre or the showldest of the rivers mouth, there is at low water with an ordinary

tyde two fathome depth. When you are past the foresaid rock with the mast, then you shall see yet a head another rocke with a mast or beacon, which lieth on the north side of the river: run in likewise close alongst to the southwards of it, and afterwards indifferent close alongst by the north land, untill you come before the towne, there runneth off sometimes a little riffe which you must give a birth to, and ancker before the towne. When you ly before the towne, there lieth a little Iland to the southwardes of you, whereupon standeth a little Chappell, to the westwards of that little Iland lieth a great Bancke, which at low water is uncovered, behind that banck it is five and six fathome, and before Viana seven, eight, and nine fathome deepe; when men come in, they may runne in about to the southwards of this foresaid Banck, and come out againe before the towne, by the little Iland, where the little house standeth upon.

When you come in about a bowe shot within the second rock with the mast, there you may well let fall your ancker, and bring Cables on the south shoare, and morre there by foure cables.

Men

Spanische mullen 17 1/2 in een Grade



De Zee-kusten van Portugal.
van Viana tot Aveiro.

Spanische mijlen 17½ in een Graad
Eng. en Frans. mijlen 20 in een Graad

Men may ancker without in the road in twelve fathome, there is the cleaneſt ground for to take in a Pilot. It is a narrow and dangerous barre for to come into.

Villa del
Conde.

From Viana to Port a Port the courſe is ſouth and by eaſt twelve or thirteene leagues, betwixt both lieth Villa del Conde, ſeven leagues from Viana and from Mettelyn. Villa del Conde is a bard haven, before the havens mouth ly many rocks, where men may faile in about them on both ſides, to the northwardes or to the ſouthwardes of them it is five and ſixe fathome deepe; further in lieth a banck thwart over the haven of two fathome at high water: within in the haven it is three or four fathome deepe, on the north ſide it is all full of rockes, which ly moſt under water, but on the ſouth ſide it is deepeſt and ſureſt, and good lying in five and ſixe fathome.

Lefons
Rockes.

Four leagues to the ſouthwardes of Villa del Conde, ly out the great rocks called Lefons, right before a little bard haven of two fathome depth, called Mettelyne, and ſouthweſt from the ſouth point of the foreſaid rockes Lefons, about a halfe league to ſeawardes, lieth a ſunken rock under water: betwixt the land and the Lefons it is ſixe and ſeven fathome deepe.

Port a Port

Port a Port. From the north point of the rivers mouth ly off many rockes, almoſt thwart over the channell. For to faile in there, you muſt runne cloſe alongſt to the ſouthwardes of the outermoſt rock, even ſo neere by it, that you may caſt with a ſtone upon it. There ſtandeth a little chapel upon the north ſhoare right againſt the rock with the croſſe, and alſo a little white houſe upon the north ſhoare ſomewhat further up upon the river, bring them one in the other, and runne in ſo right with them untill you be paſt the Caſtle. In ſailing in ſo, you ſhall not finde leſſe upon the ſhowdeſt of the Barre, then ſeventeene or eightene foot water at halfe flood, and ſhall not come to neere a ſunken rock, which lieth without in the rivers mouth, ſomewhat neerer the ſouth ſhoare then the north, whereupon there remaineth at low water no more then eleven or twelve foot water. Being within the caſtle, goe then right towards the rock with the croſſe, and ſo cloſe alongſt to the ſouthwardes of it, that you may reack it with a boathook, or els you muſt runne in three or four ſhippes lengths to the ſouthwardes of it, or alongſt by the ſouth land, untill you be paſt the rock with the croſſe, for to avoid a ſunken rock, which lieth thwart of it a little to the ſouthwardes of it, and at low water is no more then eight foot under water. Being a little paſt the rock with the croſſe, goe then up alongſt in the middle of the channell, untill you come thwart of a great white tower upon the northland, there you may ancker in foure or five fathome, or faile before the towne, there it is three and foure fathome deepe. A little paſt the rock with the croſſes is a ſhowld, whereupon remaineth at low water no more then eleven foot water, ſo that with ſhips that draw twelve foot water, men muſt ſtay for high water, it floweth there ſix foot up and downe with an ordinary tyde.

On the ſouth ſide of the river goeth in alſo a Land-diepe to the ſouthwardes of the foreſaid ſunken rock, which lieth in the rivers mouth, where the Pilotes ſometimes alſo bring ſhips in and out; that is ſometimes a good channell, and oftentimes it is caſt too againe of the ſea, ſo that there is no certainty to be written of it, that men ſhould truſt upon.

From Port a Port to Averro, the courſe is ſouth ten leagues: Betwixt them both it is all alongſt a cleane ſand ſtrand, where men may be bold to come neere the ſhoare every where in ten or twelve fathome.

Within the land upon the high land lieth a black hommock in the land, when that lieth eaſtſoutheaſt from you, then you are open before Averro: when you cannot ſee the black hommock of Carmole, then lieth there a rough ſandhill to the northwardes of the Barre, when that is thwart of you, then are you a half league to the northwardes of the Barre of Averro.

If you will faile in over the Barre of Averro, and that you come before it in ſixe or ſeven fathome, then take heed to three beakons made of maſts, which ſtand upon the ſouthland, bring them one in the other, and faile in ſo right with them eaſt and by ſouth, and eaſtſoutheaſt in over the Barre, there is in coming in, at halfe tyde, no more, then two fathome water, untill that you come by the beakons, you ſhall ſo (being come within the points) faile alongſt by a dry ſand on the larboard ſide, edge then up northnorthweſt, and northweſt about by that foreſaid dry ſand, untill you come cloſe to the norther land, and runne in by it, and then you ſhall leave all the other ſhowlds on the ſtarboard ſide, untill that you ſee the river open, and then you ſhall ſee a little houſe upon the ſtrand on the weſt ſide, goe then from thence up into the river, eaſt and by ſouth, and eaſtſoutheaſt, keeping the middle of the channell betwixt the two lands, untill you come before the Saltponds or Averro, where you may lade your ſhip with ſalt.

The coaſt of Portingall about Viana, is very good to be knowne, by the foreſaid hill of S. Rego, which is exceeding high, and lieth on the ſea ſide: the high land of Viana lieth two or three double within it.

Betwixt Viana, Villa de Conde, and Port a Port, men ſhall ſee alongſt the coaſt many towers and little houſes, Villa del Conde men ſhall ſee at ſea like a great towne.

The river of Port a Port men may know by the rocks Lefons, they are very high, and ly a little to the northwardes of the River.

The Cape de Montego is a high point, and within it in the land are high mountains. This Cape is ſometimes taken to be the Rock, but is eaſie to be diſcerned from it; becauſe of the Burlings, which ly here to the ſouthwardes, and to the northwardes of the Rock.

Of the tydes.

A Southweſt and northeaſt Moone maketh at all theſe places (on the ſea ſide) high water, and within in the havens a point or two later, according as they ly farre within the land.

How theſe lands doe lie one from the other, and from other lands.

From Camina to Viana ſouthſoutheaſt	7 leagues.
From Viana to Villa del Conde ſouth & by eaſt	7 leag.
From Villa del Conde to Port a Port ſouth and by eaſt	5 leagues.
From Port a Port to Averro ſouth	10 leagues.
From Averro to Cape de Montego ſouthſouthweſt	7 leag.
From Port a Port to the Burlings ſouthſouthweſt & ſouthweſt and by ſouth	29 leagues.
From Averro to the Burlings ſouthweſt	20 leagues.

Heights.

Port a Port lieth in	41 degrees.
Averro in	40 degr. 26 min.

How theſe lands doe ſhew themſelves at ſea.



Thus ſheweth the coaſt of Portingall from Bayone to Cape Montego, when you ſaile alongſt by it, about foure leagues off, the figure following belongeth hereto, at the croſſes one to the other.

When



When that black Hommock where the hand standeth by, is eastsoutheast from you, then are you thwart off, or open before Avero.

The high land of Viana.

B

Thus sheweth the land of Viana and to the southwards of it the Hommock by B is two leagues to the northwards of Villa del Conde.

The high land of Viana.

V

The land by Viana, and to the southwards of it towards Villa de Conde, sheweth as is portrayed in this and the figure following, by V, is the rivers mouth of Viana.

C



Villa de Conde.

This followeth the former figure the Hommock at C is two leagues to the northwards of Villa de Conde.

The high land Viana.

A

Thus sheweth the foresaid land of Viana, and to the southwards of it, when Viana (being by A) is northeast from you ten leagues.

Mettelyne thwart from you.



Rocks about a league to the north of Mettelyne.

Rokes of Mettelyne.

Thus sheweth the land by Mettelyne, when Mettelyne is thwart from you, and that you are close by the land.

Castle of the north side of Port a Port when you come from the northwards by the land.

The land to the southwards of Port a Port.



This figure belongeth to the former, and sheweth the forme of the land by Port a Port, and to the southwards of it, when you come from the southwards, you shall see a little village, within the castle of Port a Port, called S. Iohn. A league to the northwards of it lieth Mettelyne.

The land to the southwards of Port.

Avero.



Abbey.

Thus sheweth the land betwixt Port a Port and Avero, when the high land to the southwards of Port a Port is east and by south from you foure leagues.



Thus sheweth the land of Port a Port when you come from the southwards.



Thus sheweth the land of Port a Port when it is eastsoutheast from you about foure leagues.

Viana.

Villa de Conde.

Port a Port.



Mettelyne.

Thus sheweth the land from the northwards of Viana to Port a Port, when you saile alongst by it.



Port.

When Port a Port is southeast from you seven or eight leagues, then it sheweth with the land to the northwards of it, in this forme.

From Avero to the Rock.



HHe Cape de Montego lieth from Avero southsouthwest distant seven leagues: a league to the southwards of it lieth Piflage, or the River of Montego, a bard haven. From the Cape de Montego runneth off a fowle ledge of Rocks, a good wayes from the shoare, which men must avoid. Vnder the Cape men may ride for northerly windes in seven or eight fathome, a northnorthwest wind cometh right from the point, for southerly windes men may anker to the southwards of the river of Montego.

From the south point of the river runneth off a sand-riffe; when you saile in there, and that you come in out of the sea, it sheweth as if you might saile in to the southwardes of that riffe, but it is not to be done: you must saile in to the northwardes of it. Vpon the north point standeth the little village S. Catharina, and a little to the northwardes of it a Fishers village called Buarcos. Vpon the north side within the havens mouth standeth a lime kill, with a wood of Fig-trees, when you bring them one in the other, and then saile so right in with them, you runne in right in the channell, there is sometimes no more then twelve or thirteene foot water at halfe flood; you may not certainly trust to the description of this haven; for in regard it is there sand-ground, it doth shift sometimes with the great Freshuts that come off the River, and also with storms out of the sea. From Cape de Montego to Peniche, or nova Lisbona (at the Cabo del Firon which is the point within the Burlings) the course is southwest and by south ten leagues, there lieth off a rock from the point, to the southwards of it is a great bay, where men may runne in behind it, with barcks, and ly land-locke. In that bay lieth a little towne against the high land called Artogie, a little to the southwards of the Cape del Firon lieth a high round hommock, which the Dutchmen call yong Roxent.

From the Cape Montego to the Burlings, the course is southwest twelve or thirteene leagues. Behind the Burlings

is a good road and ancker ground, under the great Iland before the Ermitage, then you may anker in ten fathome, you may come in there from the northwards or from the southwards, it is there broad and wide, and every where cleane.

From the Burlings to the Rock, or Roxent, the course is south and by east, and southsoutheast sixteene leagues, but from the Cape del Firon (behind the Burlings) to the Rock, the coast lieth south and north fifteene or sixteene leagues. The Rock or Roxent is a point of land, very good to bee knowne, although you be a great wayes off, yet you shall alwayes see the sharpe hommock of the Abbey of Syntra.

Of the tydes.

AS on all the coasts of Portingall, even so here also on these coasts a southwest and northeast moone maketh the highest water.

How these lands ly one from the other, and from other lands.

From Cape de Montego to Peniche, or Cape del Firon southwest and by south 10 leagues.
From Cape de Montego to the Burlings southwest 13 leag.
From Cape del Firon, Peniche, or nova Lisbona, to the Rock, or Roxent south 15 or 16 leagues.
From the Burlings to the Rock, or Roxent, south & by east, and southsoutheast 16 leagues.
From the Burlings to the Cape S. Vincent south and by east 53 leagues.
From the Burlings to the great Canaries, southsouthwest 248 leagues.
From the Burlings to the Iland Palma southwest and by south 256 leagues.

Heights.

CApe de Montego lieth in 40 degr. 8 min.
The Burlings in 39 degr. 40 min.

How these lands doe shew themselves at sea.

C. Montego.

The land to the southwards of Montego.

A

The Cape de Montego being northeast from you foure or five leagues with the land to the southwards of it, sheweth it selfe as is portrayed in this and the figure following at the letters A A they belong one to the other.

A

This belongeth to the former, and is the land to the southward of Montego, untill thwart of the Burlings.

Thus then shew the Burlings when the northermost are east from you a league.

The land betwixt Peniche and Roxent, or the Rock, sheweth it selfe as is portrayed in these three figures following, when the high land to the southwards of Peniche, being called yong Roxent, is east from you, the like letters, as A A and B B belong one to the other.

Yong Roxent.

Burlings.

A

A

B

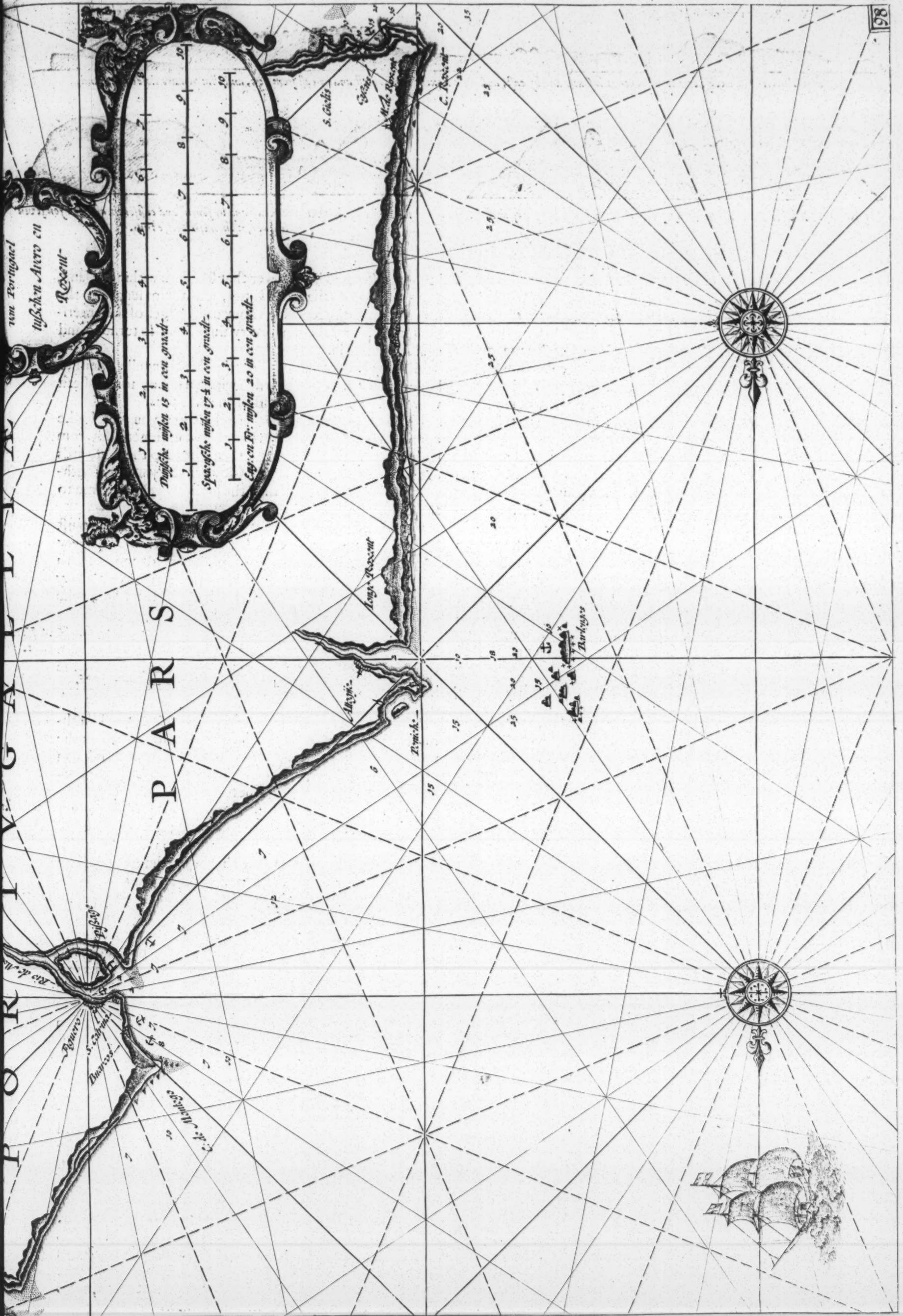
This belongeth to the former figure, and is the land to the northwards of the Rock, or Roxent.

Roxent.

B

This followeth the former figure, untill Roxent, or the rock, at the B one to the other.

Thus

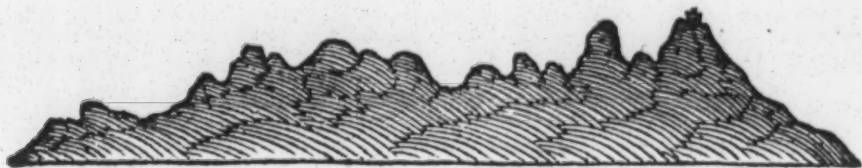


Yong Roxent northeast and by east.

Roxent south and by east.



Thus sheweth the Rock, or Roxent when it is south and by east, and yong Roxent is northeast and by east from you, and that you are close by the land.



When the Rock or Roxent is northeast from you seven leagues, it ariseth thus.



When the Rock or Roxent is east and by south, and eastsoutheast from you seven leagues, it sheweth it selfe thus.

C H A P. V.

From the Rock, or Roxent, to the Cape S. Vincent.

Cascalis.



S. Gilles or S. Gillians.

O the eastwards a great league of the point of Roxent, or the Rock, lieth the road of Cascalis, where men may ly landlockt for a northwest, north, and northeast wind, in twelve or thirteene fathome, so deepe or showld as they will. A great league to the eastwards of Cascalis, lieth the point of S. Iulian, or S. Gillians, whereupon standeth a strong castle, that is the north point of the River of Lisboua, the norther channell of the river goeth in within a bowles cast, alongft by it.

For to saile in at the norther channell.

For to saile into the norther channell, you must runne in alongft within the length of a mast alongft by the foresaid point, but comming before the castle of S. Gillians, you must edge somewhat over towards the Carrick deepe, for to avoid some fowle ground and rocks, which ly on the east side of the Castle. Being past that a little, you may luffe up againe towards the north shoare, and saile alongft by it to Restiers, and so forth even to Lisboua, men doe commonly ancker before the Village of Bolyn in twelve or thirteen fathome. Men must take heed not to come into this channell with calme weather, and with an ebbe, which falleth very strong upon the norther Cachops: this channell of S. Gillians lieth in east and by south; being within, you must saile up eastnortheast, and northeast and by east, and when you come against the Abbey at Restiers, then you must edge somewhat over towards the south land, els you must keepe the north land all alongft.

For to saile in at the Carrick deepe.

For to saile into the Carrick deep, you shall bring Cascalis, over the west point of Roxent, and keepe it so, untill that the little tower (which you shall see stand above the Abbey at Restiers) come over the white Abbey which standeth farthest from Restiers, to wit, over S. Katherines Abbey or Cloyster, goe then northeast, and northeast and by north in, keeping these marks standing thus, untill that you come within the point of S. Gillies, and then goe in alongft by the north land to Restiers within the Castle, and ancker there where you think it best. Vpon these markes you may saile in and out at the Carrick deepe. If you come from the westwards, and will goe in to the Carrick deepe, then bring Cascalis over the west end of Roxent, and saile so about the norther Cachops, untill that the towne of Lisboua come within two ships lengths neere to the south side of the River, and then further in northeast and by north; when as then you shall see the sandbay within the point of S. Gillians, then are you in the right fareway.

But if it showld happen, that you could not see the town, or the little tower, then keepe the sandbay (which lieth within S. Gillians point) northeast and by north from you, and saile so northeast and northeast & by north in, and take the founding of the norther Cachops in eight or nine fathome: when you begin to come against S. Gillians point, saile then indifferent close alongft by the northland, as is before said.

He that will turne out or in to the Carrick deepe, must

bring the foresaid little tower that standeth within the land, a ships length to the southwards, and a ships length to the northwards of the foresaid Abbey or Cloyster of S. Katherines, and then cast about every time, and so turne to and againe out and in.

Also come not with calmes in this channell, (neither bound inwards nor outwards) with an ebbe, for it falleth very strong over the east end of the Cachops.

If you will run out at the Carrick deepe, you must looke out for the foresaid little tower: when it commeth out from under that high land, bring it then a little to the westwards of the second white Abbey or Cloyster, & goe away southwest and by south, and then the little tower shall come to the Cloyster.

But if you must turne out to and againe, then you must be very carefull of your tyde, for the streames fall very strong over the Cachops, so that it is very dangerous with calmes to come in or out at these channells, but especially in failing out with an ebbe, for it falleth thwart over the Cachops.

From Roxent to S. Vves point, the course is southeast & S. Vves by south ten leagues, that is also a point good to be known, by a high round hill which lieth on it, also men shall see the top of the castle of Sisembre upon a flat hill like a great top or ridge of a countrey house.

S. Vves point is called Cape de Pitcher, & by the Dutchmen Cape de Spighel, a little to the southwards about the point, is a rent or clift in the land, before it is good riding in nine and ten fathome. Before Sisembre men may also ancker in fifteene or sixteene fathome.

Five leagues to the eastwards of Cape Pitcher, or S. Vves point, lieth S. Vves, there lieth a great banck before the havens mouth. Beneath the high land upon the water side, standeth a white castle, when that is northnortheast from you, then are you right before the havens mouth.

If you will saile over the bancks into S. Vves comming off from Cape Pitcher, or S. Vves point, then keepe the west point of Sisembre a ships length without the east point, and goe then east, and east and by north on, untill that the castle of Palmelo which standeth above S. Vves, commeth in a valley over the foresaid white castle upon the water side. Saile then northnortheast right in with them, untill you come within the castle that standeth upon the water side, and then in alongft within a cables length by the northland northeast and by east, untill you come before the towne of S. Vves, or Setuball. But when the Castle of Palmelo commeth under the land, that you cannot see the same any more, there standeth also a white house on the north side of the castle that standeth on the water side, keepe that then so standing, and runne in right with them, untill you come within the white castle, & goe then in (as before is said) alongft by the north land, untill you come before the towne of S. Vves, and ancker before the Fishers village in six or seven fathome. Vpon the banck is at halfe flood three fathome and a halfe water, when you saile in over it, you shall finde at least seven divers showlds. There goeth in also a channell alongft by the south land, but that is onely for barkes: betwixt this souther channell and the right deepe ly the banckes at some places so showld, that they ly almost above water.

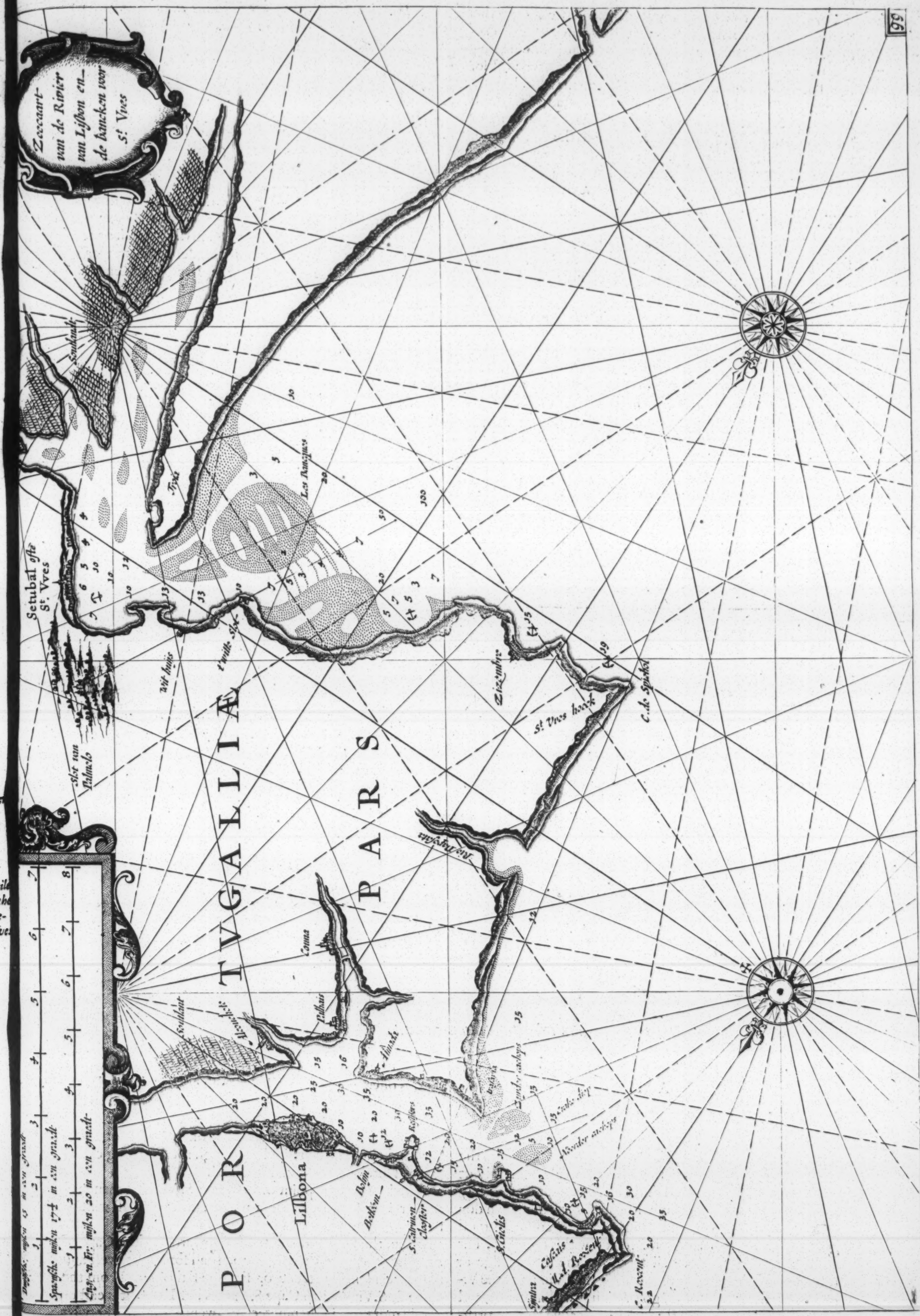
For

Zaccart

Setubal offe St. Vves

Road under S. Vves point.

For to saile in over the bancke before S. Vves



For to finde the deepest water in sailing out over the banck of S. Vves, with shippes that draw much water, doe thus: when you saile out from the white castle, then bring the foresaid white house over the north side of the castle, that standeth on the water side, so that you may see directly through betwixt them, and keepe them so standing, untill that S. Vves point begin to come without the east point of Sifember, then bring the white house to the south side of the Castle, and runne so out, you shall have there the deepest water. But when you can see that castle of Palmelo, that is a direct alongst marck for to runne over the banck: And then that white castle must be from you northnorth-east northerly.

Salines.

It is from S. Vves point to Cape de S. Vincent south and south and by east nine and twenty leagues, betwixt both are no knowne havens. Salines a little river lying halfe wayes, is also unknowne.

Of the tydes.

A Southwest & northeast moone maketh on these coasts full sea, within the havens a point or two later, according as they ly far within the land.

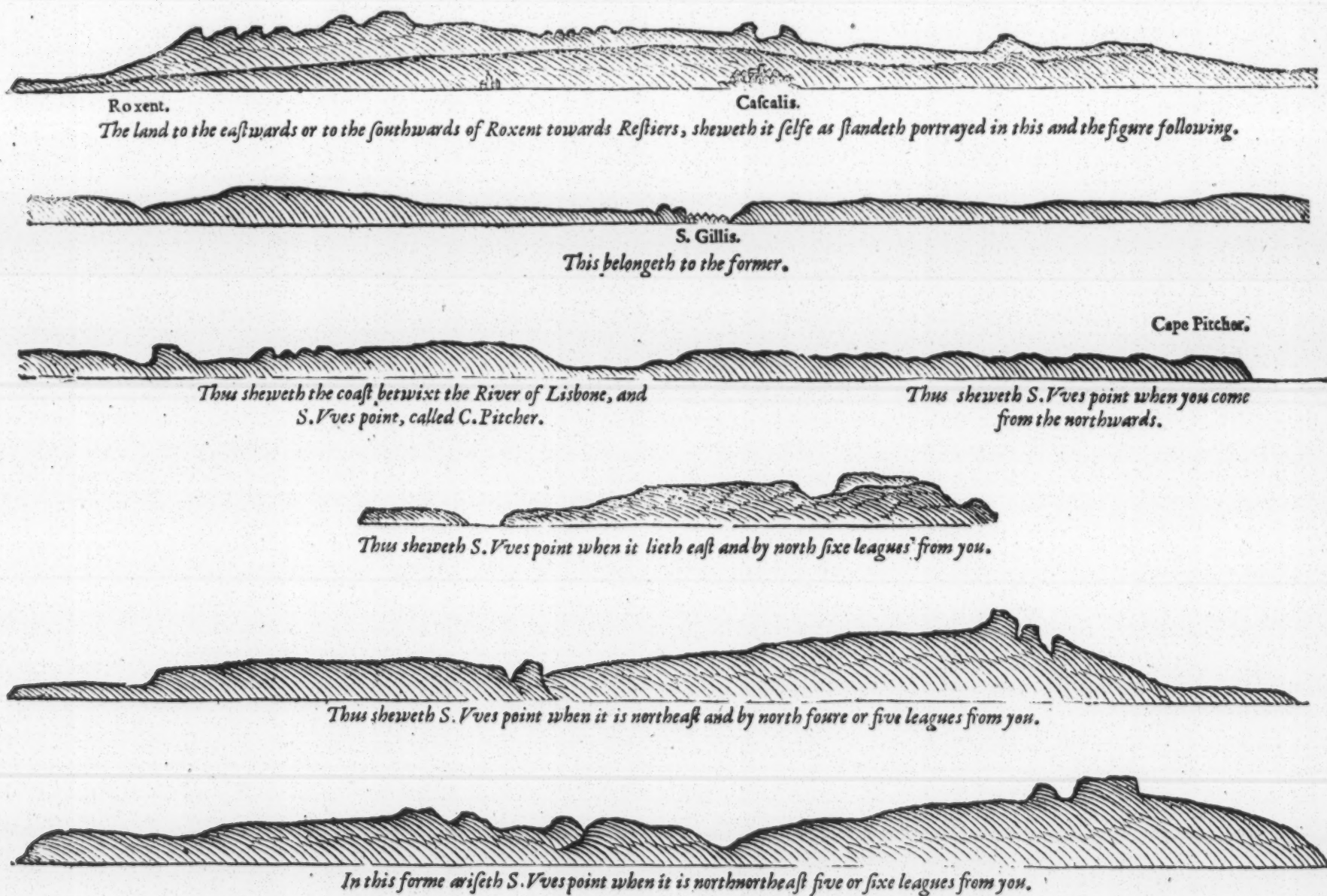
Heights.

Roxent lieth in 38 degrees 52 minutes, or as some hold in 39 degrees.
Cape Pitcher, or S. Vves point lieth in 38 degr. 25 min.

How these lands doe lie one from the other, and from other lands.

From Roxent to the C. Pitcher, or S. Vves point south-east and by south 10 leagues.
From Cape Pitcher to the Cape S. Vincent south and south and by east 29 leagues.
From Roxent to the Cape S. Vincent south and by east 37 leagues.
From Roxent, or the river of Lisbon, to the great Canaries southsouthwest westerly 240 leagues.
From the river of Lisbon to the Ile de Salvages southwest and by south 208 leagues.
From the river of Lisbon to Porto Santo f. w. 160 leagues.
From the river of Lisbon to the Ile Madera f. w. 173 leag.
From the river of Lisbon to the Iland Tercera west 273 leagues.

How these lands doe shew themselves at sea.



C H A P. VI.

The Coast of Algarve from the Cape S. Vincent to Ayemonte.



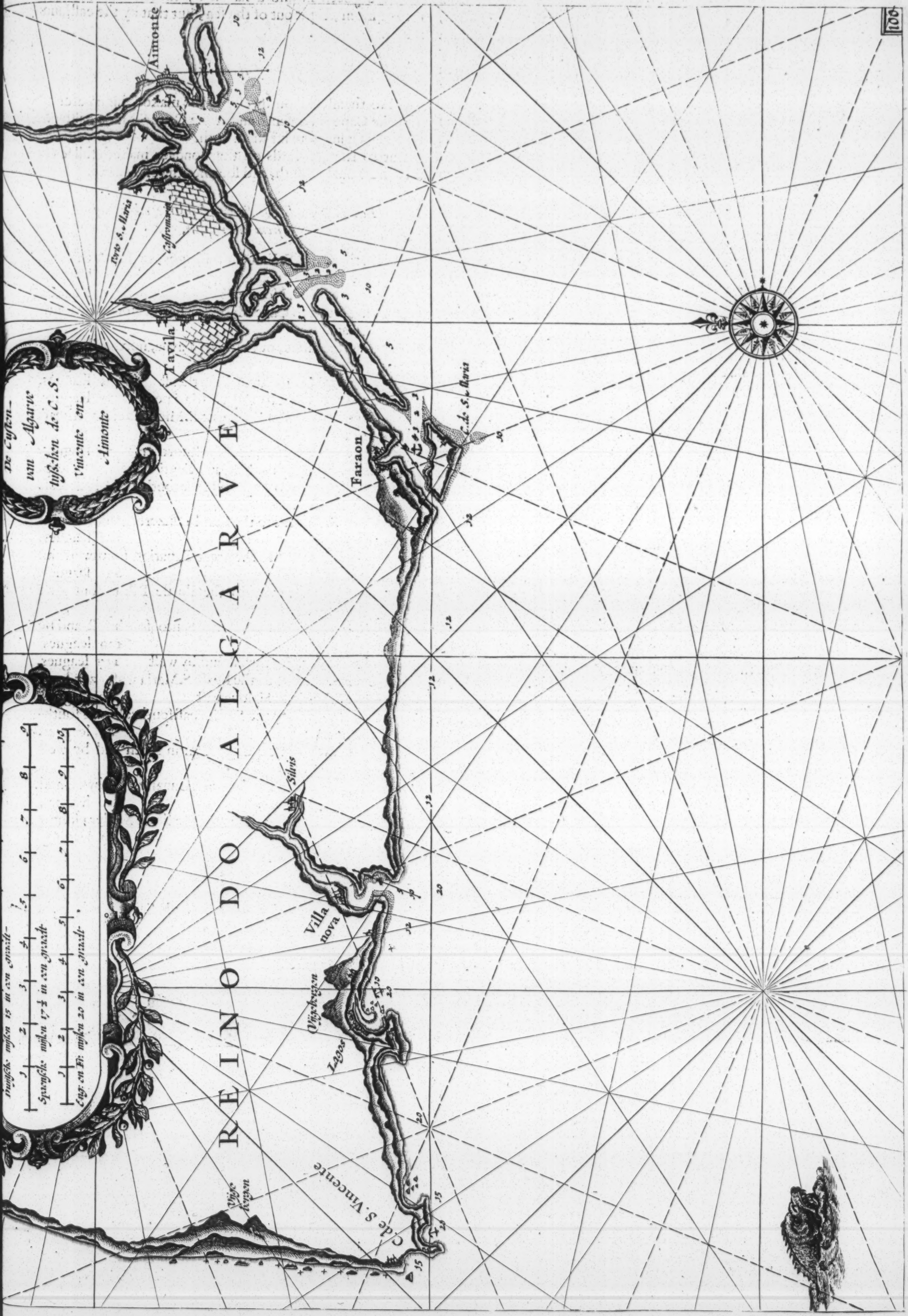
Rom Saint Vves to Cape S. Vincent, the coast lieth most south and by west about two and thirty leagues, betwixt both ly some high steepe hills, which men doe call the Salines, which are very good marcks for to know this coast by, but above all serve for the knowledge of this coast of Algarve, or of the Cape de S. Vincent, the Vigneberghen, or Mount Chigo, which ly within Lagos, and may be seen farre off at sea. A halfe league to the north-

wardes of Cape S. Vincent lieth a high cliffe in the land, that is somewhat whitish, and higher then the other land; when you see that, then you are by the Cape de S. Vincent. Vpon the point of the Cape standeth a broken Abbey or Cloyster, and close by the point lieth a high rock, being called by the Dutch failers Monnick strand.

A little about the point of the Cape S. Vincent men may ancker in a sand-bay, for a north and northwest wind in twenty fathome.

About the second point, to the eastwardes of the Cape, is another Sand-bay, there is a good road for a northwest and north wind in fourteene or fiftene fathome. From the Cape de S. Vincent to Cape S. Maries, or Faro, it is east or a little more southerly nineteen or twenty leagues: betwixt them

Road to
Cape S.
Vincent



de Cyfen-
van Algarve
tuffchen de C. S.
Vincente en-
Aimonte

Duifels: mijlen 15 in een graad
Spanfche mijlen 17½ in een graad
Eng: en Fr: mijlen 20 in een graad

R E I N O D O A L G A R V E

Aimonte

Two S. Maria

Tavira

Faro

C. de S. Maria

Silhis

Villa nova

Vijfbergen

Lagos

C. de S. Vincente

Vijfbergen

them both by Lagos, or Laves, & Villa Nova. From Cape S. Vincent to Lagos, it is east and by north seven leagues, there is a tyde-haven through betwixt the rockes, behind a strand of chindle, which falleth dry at low water, men may also ride there for a northwest, westnorthwest, and north wind, in ten or twelve fathome.

Villa Nova Villa Nova lieth about foure leagues to the eastwards of Lagos; betwixt both, three leagues from Lagos, and one from Villa Nova, lieth a suncken rock, whereof men must take heed. Villa Nova is a good haven, it lieth in north, and north and by west, at halfe flood you shall have there two fathome water; within in the haven on the east side lieth a little lland or rock, and upon it standeth a tower or little house, also there stands upon the land a great mast with a barrell upon the top of it: when the little tower, or little house, and the mast come one in the other, then you must faile right in with them into the haven, alongst by the eastland untill you be past the little tower, the west side is flat and showld, when that you come by the mast, then you must goe up to the westwardes before the towne of Villa Nova, there you may ancker in foure or five fathome.

Faro. From Villa Nova to Faro, or Cape de S. Maria, it is about nine leagues. Vpon the strand standeth a fire-tower, and from the point shooteth off a riffe which men must avoid; into the haven of Faro men must goe in from the eastwards, it lieth west, and westnorthwest in, and they must leave the tower on the larboard side, and run in two or three fathom; being within, they may ancker over against the towne of Faro under the lland in three fathome, it is upon the barre at halfe flood two fathome deepe.

The Cape S. Maries sheweth it selfe at sea (when you first see it) in one round hommock, which is a good marck for to know the whole coast of the Condado by.

Five leagues northeast and by east from Cape S. Maria or Faro lieth Tavila, that is a crooked showld barre, which almost every yeare doth shift, and is not to trust to for to faile into it, unlesse it were first beakond, or set with buyes, it is at halfe flood scarce two fathome deepe, men ly there a little within the sandhills in foure fathome.

From Tavila to Ayemonte the course is eastnortheast five leagues.

Ayemonte is a deepe Barre, and one of the best havens in the whole Condaet, it lieth in northwest by the eastland, at halfe flood it is three fathom deep, there ly some showlds before the haven, the markes thereof are these: There standeth a tree upon the east side of the haven or rivers mouth, when Ayemonte commeth right against over the tree, then are you to the eastwards of the showlds or sands, which ly before the haven, then you must goe towards the foot strand, and lead it in alongst by it northwest, and northwest and by west; when you are within, you must goe up to the northwards before the towne, or if you will goe before Porte Maria, the northwest course will bring you there; within, it is wide and broad, and six or seven fathom deepe.

There goeth in also a haven by the westland, where men come in, right out of the sea, but that by the eastland is best.

Of the tydes.

A Northeast and southwest Moone maketh high water at the Cape S. Vincent, and at the Cape S. Maria, also on the coasts lying betwixt them both.

But to the eastwards on the Condaet maketh full sea a southwest and by south, and southsouthwest Moone.

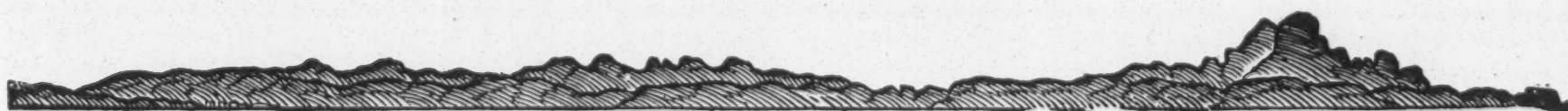
How these lands doe lie one from the other, and from other lands.

From the Cape S. Vincent to Lagos, or Laves east and by north	7 leagues.
From Lagos to Villa Nova east	4 leagues.
From Villa Nova to Cape Maria, or Faro, east and by south	9 leagues.
From Cape S. Maries, or Faro, to Tavila, northeast and by east	5 leagues.
From Tavila to Ayemonte eastnortheast	5 leagues.
From Cape S. Vincent to Cape S. Maria east	19 leagues.
From Cape S. Maries to Leepe, or S. Michiels eastnortheast	17 leagues.
From Cape S. Maries to Saltees eastnortheast	24 leagues.
From Cape S. Vincent to the Cape Cantin south	87 leag.
From Cape Vincent to Cape de Geer south westerly at least	133 leagues.
From Cape S. Vincent to the lland Lanzerotte southsouthwest	165 leagues.
From Cape S. Vincent to the great Canaries, southwest and by south	210 leagues.
From Cape Saint Vincent to the Ile de Palma southwest	224 leagues.
From Cape S. Vincent to Porto Santo southwest and by west	139 leagues.
And to Madera southwest and by west	157 leagues.
From Cape S. Vincent to the Ile de S. Maria west	245 leag.
From Cape S. Maria to Sipiona east	29 leagues.
From Cape S. Maria to the Straite eastsoutheast and south-east and by east	45 leagues.
From Cape S. Maria to Cape Cantin south and by west	90 leagues.
From Cape S. Maria to the great Canaries southwest and southwest and by south	220 leagues.
From Cape S. Maria, or Faro, to the Ile de Madera southwest and by west	93 leagues.

Heights.

The Cape de Saint Vincent and Saint Maria ly in 37 degrees.

How these lands doe shew themselves at sea.



Thus sheweth the land about the Cape S. Vincent, when you come from the northwards, and saile alongst by it.

Cape S. Vincent.

Mount Chigo.



The Cape S. Vincent sheweth thus, when it is north and by east, and northnortheast from you about eight leagues. The Vighebergh or Mount Chigo lieth then northeast and by north from you, in forme as is here portrayed.



When the Vighebergh or Mount Chigo is northnortheast and northeast and by north from you twelve or thirteen leagues it sheweth thus in one long hill going downe flat at both ends, with another peece of land much lower to the eastwardes of it.

Thus



Thus sheweth the Cape S. Vincent, when it lieth northwest seven leagues from you.



Thus sheweth the Vighebergh, or Mount Chigo, when it is with cleare weather northnorthwest from you eleven or twelve leagues.

Vigheberghen, or Mount Chigó.



White point. Lagos. Villa Nova. Village. Albofero.

Thus sheweth it selfe the land about Lagos and Villa Nova, when you are thwart from Villa Nova, not farre from land, a little to the westwards of Lagos, lieth a white point, whereby men may easily know Lagos. The Cape S. Maria sheweth it selfe then, as in the figure following.



Albofero. This is red land. Cape S. Maria.

This followeth the former figure from Albofero to the Cape S. Maria.



Thus sheweth the Cape S. Maria when it is northeast and by east from you nine or ten leagues.



When the Cape S. Maria is northeast and by north from you, it sheweth it selfe thus.

C H A P. V I I.

The Coast of Andalusia from Ayemonte to the Strait of Gibraltar.



From Ayemonte to Leepe, or Saint Michiels, the course is east and by north seven leagues. Leepe hath uncertain bars which oftentimes shift, where men may not trust themselves to saile into without a Pilot, the Barre that goeth into the eastwardes of the great Iland, is held to be the best, from thence they must goe up to the westwardes towards Taron, and the River, & so come to Leepe, and there they take their lading in before the deepe.

S. Michiels The Barre of S. Michiels was wont to runne thwart over into sea, and to be at halfe flood three fathome deepe, and before S. Michiels five fathome: from thence men may come through within over the showlds at high water into the River at Leepe. Also men were wont to come in by Taron; but for certainty it is needfull to take in a Pilot for these Barres.

Palos. Saltees. From S. Michiels to Palos, or Saltees, the course is east, and east and by south seven leagues, here men saile into the great Condaet, this haven goeth in at the west end of the Rooduyn, there standeth a great broad tree to the westwardes of that white cliffe, that you must keepe over a red sandhill, like as if it were red earth: this sandhill goeth sloping downe: Runne in upon these markes unto the strand, about north and north and by west, then shall the tower Odier which stands above Wolves, come over the east side of the havens mouth, keepe them so standing, and saile alongst by the strand, within two cables lengths untill you come about the point, and then you runne up north to Palos, or northwest to Wolves, and ancker there in fixe or seven fathome.

Wolves. It is deepe there within, fixe, seven, and also three and foure fathome in failing up, according as men doe saile farre up, or els not, this Barre is upon the showldest at half flood three fathome and a halfe, but within it is five fathome deepe.

West. Water. v. Booke.

There commeth also a channell running out of the sea betwixt the sands, then Wolves commeth to the east side of the havens mouth, & men saile northnorthwest in, when they are within the havens mouth, then they must doe as before is said. This channell is three fathome deepe.

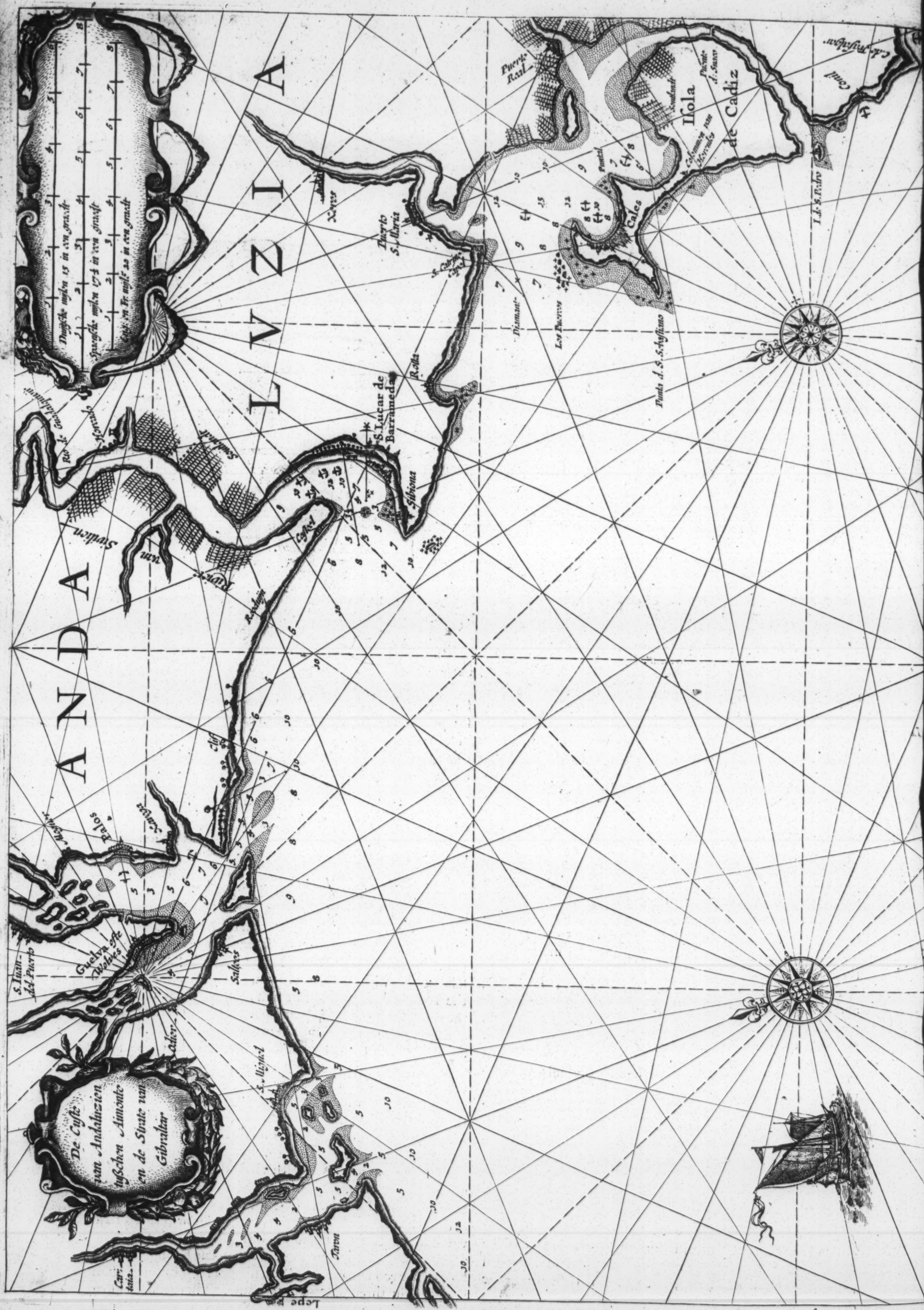
For knowledge of the land hereabouts, you shall understand that at the west end of the Roduyn, lieth a white steepe land, clyffy, being reddish earth or chalke: hee that falleth therewith, may think that he is by the havens mouth of Saltees, upon it stand some little woods of trees, els the land is all without trees, reddish sand, and therefore called Rooduyn, or Red sandhill.

From Saltees to the river of S. Lucas, the course is south-east and southeast and by east betwixt eight & nine leagues.

If you will saile into the river of S. Lucas, then saile alongst by the red sandhills, so long untill that you get the Towne of S. Lucas in sight about eastsoutheast from you, there lieth a white Cloyster to the eastwardes of the towne, against the high land, and there standeth a great tree upon the high land, bring the tree even to the north side of the Cloyster, so that you may almost see through betwixt them, but not over the Cloyster, keepe them so standing, and saile right in with them, and so you shall not come too neere the rocks to take hurt of them, and you shall have upon the showldest at low water and neepe tydes, three fathome, and at high water two and twenty foot, or scarce foure fathome. When the Castle of Chipiona and the Church beginne to come one in the other, then you come to the first rocks or showld, when the Church and Castle are right one over the other, then they stand southsouthwest from you, then you are upon the showldest of all, but when the castle with the church come againe one through the other, then you get againe deeper water, three fathome and a halfe, and four fathome at low water with a neepe tyde, saile in alongst upon the foresaid markes of the Cloyster and the tree, but take good heed that you bring not the tree over the Quire, at the south end of the Cloyster, for you should then come very close to the rockes, rather bring the tree a little to the northwardes of the Cloyster, for you can not lightly take hurt of the red sandhills, but you may borrow of them upon your lead in three and foure fathome. There stands also a

S 2

mill



mill to the eastwards of the towne, take heed that you bring not that also over the round Cloyster that standeth a little to the eastwards beneath at the towne, but keepe them a handspikes length asunder, and then you saile in the best deepe. But if the foresaid mill, and that round Cloyster come one in the other when you saile in, then you shall (without faile) come upon the rocks or showld. When you are within over the showld, saile then towards the strand of S. Lucas, untill that you see altogether open into the river, for to avoid the riffe that shooteth off from the northwest point of the river, saile on alongst by the shoare, and ancker before the little church with the crosses (which stands below in the sandhills) in five, sixe, or ten or twelve fathome, so neere as you please. Men may also turn out at this same channell with indifferent ships or barks, but they must take good heed, it is not there very broad.

There goeth in also a channell by the land of Sipionen or Chipiona; for to find it, you shall saile in within two cables lengths neere by the foresaid land, untill that you be within the second showld, then you must edge somewhat off from the land, untill you come upon the foresaid markes of the Cloyster, and the great tree, then you must runne in alongst upon them, as is before taught. The river of S. Lucas is good for to know, by the Rooduyn, or red sand-hill which lieth to the westwards of it.

From Sipionen to Cales Malis the course is southeast nine leagues. Cales is knowne by the mountaine of Granada, when that is eastnortheast and east and by north from you, saile then right in with it, and you shall not faile to fall right before Cales. At the point of Sipiona ly many rockes above water, and betwixt the point of Sipiona and Cales. Foure leagues from Sipiona lieth Rotta, there shooteth off a great ledge of rocks from the point.

He that will goe into the bay of Cales, let him runne in right with the rockes which ly on the west side of the Bay, being called *Los Puercos*, and within two cables lengths in alongst by them in fixe or seven fathome, untill he come before the towne of Cales, and ancker there so deepe as he pleaseth, in eight, ten, twelve, or fifteene fathome, the fare-way lieth in most eastsoutheast and southeast and by east.

There lieth a rock under water called the Diamant, about northnortheast and northeast, and by north from the *Puercos*, a great halfe league. When S. Katharins chappell upon the north land is eastnortheast from you, then are you thwart of that rock, there is at halfe flood three fathome of water upon it, the marks of this rock are these: When Mary Church commeth over the north end of Cales, (that is a Cloyster which standeth without Cales) there stands also a house upon the hill, where men goe alongst by, when they goe to Sheres, when that house commeth over the chappel which standeth upon the water side, to the westwardes of Marie port: when these marks come together one in the other, then you showld saile upon the foresaid rock, there is upon the showld of it at high water, three fathome and a halfe water upon it. But set the two high hills which are to the southwardes of the way of Sheres, that they be a little a sunder, and that they doe not come one in the other, then you cannot saile upon this rock. The *Puercos* rocks ly from the north point of Cales about halfe a league. He that lies before Cales in the road, hath Puntall south from him, or thereabouts, according as he lieth neere to Cales. But to the southwardes of Cales lieth a rock, come not neerer that then in seven fathome.

The Bay of Cales is wide and broad, men ly there in five and sixe fathome, the northwest wind commeth there open in. If any man therefore would go further in behind Puntall, let him goe in southeast betwixt the point of Port reall and Puntall, and runne up about the point of Puntall, there men ly landlockt for all windes: there men may lay their ships dry a ground for to make cleane. He that will goe into the Creeke, must take a Pilot, and runne up into the water of Port reall, leaving the little Iland on the larboard side, and then Herods Creeke shall open it selfe, and there he must saile up, keeping the middle of the channell, till he come before the Salt heapes.

For to saile from Cales to the Strait, men must go away south, and south and by east to the Cape de Trafalgar, and then they shall run far enough without the banck or rocks which ly off southeast from Cales. From the point of S. Sebastian to Cape de Trafalgar, which is the north point of the Strait on the west side, it is southsoutheast ten leagues. About two leagues to the northwardes of the Cape, lieth Conil, there is a faire sandbay where men may ancker in twelve, thirteene, and fourteene fathome cleane ground. About the Cape Trafalgar a great halfe league from the land, lieth a rock eight or nine foot under water. Betwixt it and the land men may saile through, they that come out of the Straits must looke out for the same, feing there have divers ships beten upon it.

Of the tydes, and course of the streames.

BEfore the Condaet on the coasts a southsouthwest and northnortheast moone maketh high water.

Before Palos Moguer and Wolves maketh full sea a south and north moone.

Before the river of S. Lucas, and at Cales before the bay maketh full sea a southwest and by south, and northeast & by north moone.

At Cales in the Bay maketh high water a southsouthwest moone.

The ebbe falleth without the *Puercos* to the southwardes towardes the Strait, and the flood towards the land to the northwardes: but for the most part, the flood falleth thwart into the land, about the havens.

How these lands ly one from the other, and from other lands.

FROM Ayemonte to Leep east and by north 7 leagues.
From Leep to Saltees or Palos east and east and by south 7 leagues.
From Saltees to the River of S. Lucas, or Sipiona southeast and southeast and by east 8 or 9 leagues.
From S. Lucas or the point of Sipiona, to the point of Cales, the course is southeast 9 leagues.
From Cales to the point of the Strait s. f. e. 10 leagues.
From Cales to the great Canaries the course is southwest 240 leagues.
From Cales to the Ile de Madera westsouthwest 200 leag.

Heights.

THe coast of the Condaet lieth in 37 degrees, and 15 or 20 minutes.
The Iland Cales in 36 degrees, 30 minutes.

How these lands doe shew themselves at sea.

The land betwixt Wolves and the River of S. Lucas, sheweth it selfe when you saile alongst by it, like as is portrayed in these three figures following.

Blackland to the northwardes of Rooduyn or the red sandhills.

Blackland to the northwardes of Rooduyn or the red sandhills.

Rooduyn or red sandhill.

This belongeth to the former figure the AA one to the other.

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This

Roodlyn or Red sand hill.

Granado hill.

B

This followeth to the two former figures, the BB one to the other.



When you saile towards Cales, and the mountaine of Granado commeth to stand east from you, then it sheweth it selfe in this forme.

C H A P. V I I I.

The Strait of Gibraltar, and the coast of Spaine, from the Strait to Modrill.



HE that desireth to saile into the Strait of Gibraltar, comming from Cales, let him goe from the point of S. Sebastian, which is the westermost point of the Iland Cales, south & by east, and south-southeast, towards the Cape de Trafalgar; untill he be a good wayes without the land for to avoid the Spanish coast

which is fowle: About the Cape Trafalgar a great halfe league from the land lieth a rock eight or nine foot under water, yet you may saile through betwixt it & the land: there lieth off west and by south from the Iland Tariffe, a banck of stones two leagues, or two leagues and a halfe into sea: whereupon is eight, nine, or ten foot water; when it bloweth hard, men may see it breake. The foresaid point of Saint Sebastians, and the Cape de Trafalgar ly ten leagues asunder.

When you are then somewhat without the Cape de Trafalgar, and set your course southsoutheast, and southeast & by south, then you shall fall with the land of the Barbary coast, within the Cape de Spartell, about thwart of Tanger, lying in a great bight and Sand-bay. Vpon the west point of this bay of Tanger, standeth a Castle somewhat high, and yet somewhat higher upon the high land, standeth a little watch-tower: but to the eastwards of Tanger standeth also an old ruinous watch-tower, whereby Tanger is very good to be knowne. From Tanger to Ape-hill, the coast lieth most eastnortheast, and east and by north, that is the right course for to saile through the Strait. If you will saile into the Strait by night, then keepe you neereft to the Barbary coast, which is very cleane, and there you can take no hurt: but the Spanish coast is fowle, as is before said. They that will saile alongft by the Spanish coast, they must goe close alongft by the shoare, and runne through betwixt the Iland Tariffe and the foresaid fowle grounds, close alongft by the Iland, or els must keepe farre off from the Iland, for to runne alongft without the showlds; but in the midst, neere alike unto both lands, it is best.

Three leagues to the eastwards of the Iland Tariffe, lieth the point of Cabrita, being the west point of the great Bay of Gibraltar, over against the hill of Gibraltar: a little to the westwardes of it, is a good road for a northeast wind, in twelve, ten and eight fathome, not farre from the shoare, thwart of a great rock which lieth close upon the water side, a little to the eastwardes of the fire-tower: A little to the westwardes of that fire-tower which standeth upon the foresaid point, is a faire sand-strand, betwixt the two towers there you shall ly smooth for the westerne growne sea.

At Gibraltar is a faire Bay almost like a haven; If you will ancker in the Bay of Gibraltar, then saile so farre into it, untill that the innermost point of the high hill of Gibraltar, doe stand east from you, thereabouts it is deepe five or sixe fathome, and cleane ground: towards the mill it is showlder water of three fathome. Men ly there in the Bay landlockt for a west wind, a south wind commeth from the point of Gibraltar hill, but a southwest wind that bloweth there open in. From thence are brought good winds.

When you will set saile from the road of Gibraltar with an easterly wind, it is good to beare up somewhat before the wind towards the west shoare, and then forth out alongft by the lee shoare, for the easterly winds doe fall with such whirling and foreflaughes, from over the high land of Gibraltar, that you shall be hardly able to get out of the Bay alongft by the high land. When you come from the eastwards, and will saile out through the Straits, and that you are somewhat neere to the Spanish coast, then you must be very carefull, for then you bring the hill of Gibraltar, against the high land of Barbary, and in regard the land to the northwardes of Gibraltar hill is low, it seemeth (to look to) to be nothing els, then as if there were the opening of the Straites. It hath heretofore happened, that some which have so mistaken it, have sailed into the bay, thincking it to be the opening of the Strait, and so have lost their ships there. Therefore it is very needfull, that men take great care not to mistake themselves of the hill of Gibraltar, and if men doe take heed of it, it is good for to know.

Estepona lieth five leagues to the eastwardes or to the northwardes of Gibraltar, betwixt them both stand divers fire-towers upon the coast, there is cleane ground for to ancker. If you will ancker to the eastwards of Gibraltar, by the next fire-tower to Gibraltar, then bring Gibraltar southsouthwest from you, and ancker in five and twenty fathome, there is cleane ground, and black sand: but if you will ancker by the second fire-tower, there is a valley, and there you may fetch water, and ancker in twenty or two and twenty fathome, there is also cleane ground, and better lying for to set saile with easterly winds, for those that are bound out of the Strait.

Before Estepona men may ancker in fourteene fathome, that is a place for to lade fruite and wines; five or sixe leagues to the eastwards of it lieth Marveles, betwixt them both stand five watch towers upon the coast.

From Gibraltar to Marveles the course is northeast and by north distant twelve leagues. If you will ancker at Marveles, then you must looke out for two Packhouses which stand upon the strand, and a great square watch-tower close to the eastwardes of the foresaid Packhouses: bring the gate of the towne so, that you may see through betwixt the Packhouses and the watch-tower, and ancker there in nine or ten fathome. Right before Marveles, the ground is not cleane. About a shot of a Cast-peece to the westwardes of the towne, men may fetch fresh water.

From Marveles to Fangerola it is five leagues eastnorth-east betwixt them both stand also five watch-towers. Fangerola is a castle, and hath a faire sand-bay, there is good ancker ground in seven or eight fathom, a flat rising ground, men may ly there landlockt for a westsouthwest wind.

From Fangerola to Cape de Moll, the west point of Mallaga, the course is forth eastnortheast two great leagues: but from the west point of Mallaga to the town of Mallaga, the course is northeast, and northeast and by east foure leagues, it is there betwixt them both a faire strand, where men may ancker all alongft in ten or twelve fathome.

Mallaga is knowne by these markes: There standeth a Castle to the eastwardes upon the high land, and there come two walles downewardes towards the sea to another castle which lieth by the water side. Before that same castle is now the road, that which was wont to be the right road, is now altogether spoiled by casting of ballast.

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Tariffe.

Tanger.

Cape de
Cabrita.Bay of Ci-
braltar.

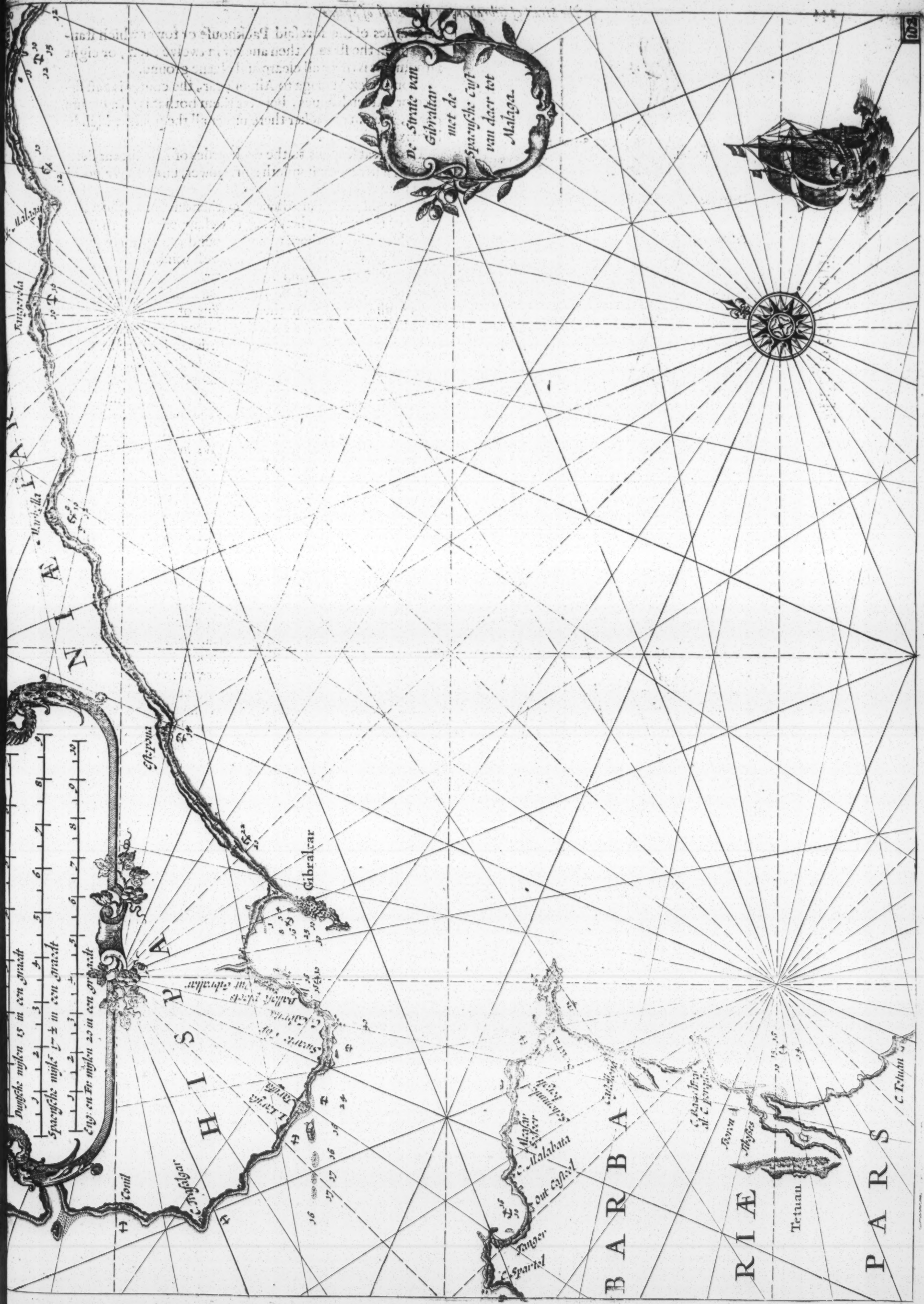
Estepona

Marveles

Fangerola

Cape de Moll

Mallaga



De Straete van
Gibraltar
met de
Spaansche Eijde
van daer tot
Malaga.

Duysche mijlen 15 in een graet
Spaensche mijlen 12 in een graet
Eng. en Fr. mijlen 20 in een graet

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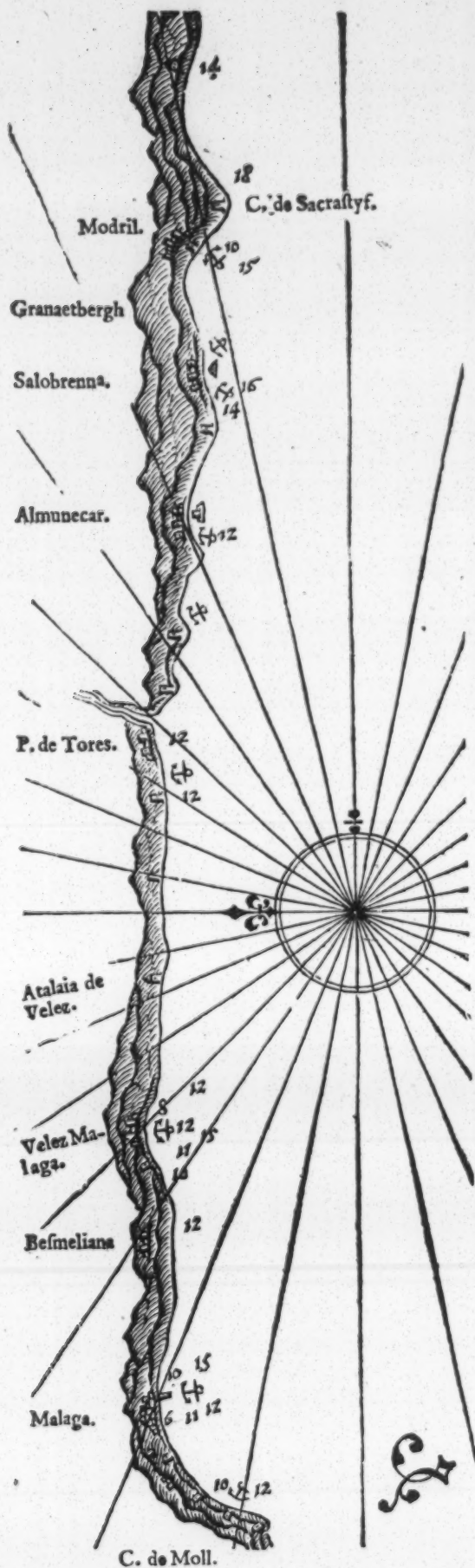
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The Coast of Spaine from Malago to Modrill.



Read before
Mallaga.

If you will ancker in the road before Mallaga, then anker in ten, eleven, twelve, thirteene, or fourteene fathome, thwart off from the head, so that the head come to ly from you north and by east, there is very good ground the anckers hold there well, also men ly there out of danger for the Moores.

Velez Mallaga lieth from Mallaga east and by north distant seven leagues, betwixt them both men may anker all alongst by the shoare. About a league to the westwardes of Velez Mallaga standeth a little Castle; before it is good anker in ten or twelve fathome. By the next tower, to wit, the next to the little Castle, there is fresh water to be gotten on the land.

Velez
Mallaga.

The towne of Velez Mallaga lieth about a league within the land; but upon the strand standeth a great Packhouse which to see to, is like a castle.

If you will anker at Velez Mallaga comming from the westwardes, then you must give the west point a birth, there lieth off a bancke a good wayes into sea by the watchtower which standeth below, to the westwardes of Velez Mallaga: but if you runne alongst by the shoare in ten or eleven fathome, without comming neerer the shoare, then you cannot take any hurt of the foresaid bancke or riffe. When as then the towne of Velez Mallaga commeth a little to the

eastwardes of the foresaid Packhouse or tower which standeth upon the strand, then anker in twelve, ten, or eight fathome, it is there all cleare and cleane ground.

From Velez Mallaga to Almunecar, the course is east fifteen or sixteen leagues, betwixt them both it is all a cleane coast, men may anker there under all the points which ly betwixt them both.

Two great leagues to the westwardes of Almunecar lieth a point, whereupon standeth a fire-tower, under it is a good road for a west wind.

If you will anker at Almunecar, then anker to the westwardes of the rocke, where the little chappell standeth upon in twelve fathome, there is good ground, and shall ly there landloct for an east and westnorthwest wind.

Salobrenna lieth from Almunecar foure leagues to the eastwardes, that is a little towne with a little castle, and lieth upon a hill a little about the east point of Almunecar, and right before Salobrenna lieth a little Iland, he that will anker there must anker to the westwardes of it, there he shall ly landloct for a northeast wind, and also for a west wind, then he shall have succour of the east point of Almunecar. Men may also well anker to the eastwardes of that little Iland, but to the westwardes of it is the best road, there ly also all the ships, they may anker there in fourteene and fifteene fathome, cleane soft ground; in sixteene fathome they shall ly somewhat too farre out. Men may (if need so require) run through betwixt the foresaid little Iland, and the maine land, betwixt them both there is about sixteene or seventeen foot water, and the little Iland is round about cleane, so that men may runne very close about by it without feare.

Two great leagues eastwardes from Salobrenna in the same bight, a halfe league from the sea side within the land, lieth Modrill, which hath two Churches and some trees, thereabouts upon the water side standeth a square tower.

If you will anker at Modrill, then anker before the foresaid square tower which standeth upon the water side in twelve or thirteene fathome, so that you may see the little tower upon the east point even without the other point, there is cleane ground, men ly there landloct for an east wind, but a southeast and south wind, make there (like as at all places on these coasts) a lee shoare. A little to the eastwardes of Modrill, lieth the point called Cape de Sacrafty.

The Coasts of Barbarie.

For to saile out of the Bay of Gibraltar to Tetuan, then runne over south and by east, about close by the point of Seuta, especially with a westerly wind, you shold otherwise be caried away so with the current, which then commonly runs to the eastwardes, that you shold fall too farre to the Leewardes. Comming then about by the point of Seuta, you shall see out a head a black point called Cape Porques, lying south from the point of Seuta. When men ly in the Bay of Gibraltar, they may see the foresaid Cape Porques alongst over Seuta, which is a point very good to bee knowne, saile towards that point, and with a west wind luffe up so neere as you can. When you come about that point, then you shall begin to see Tetuan, which lieth up against the high land, a great league within the land: runne then so farre to the southwardes, untill that the east end of the towne come right over a little round hommock which is upon the high land within. In the middest of the towne standeth a black tower, & in the innermost land of all within, ly three little hills, which doe (as it were) looke over the outermost innerland, bring the three little hills over the foresaid black tower, and anker then so farre from the shoare, that the first little hill of the high land to the southwardes of Seuta towards Cape Porques, come a little without Cape Porques, there it shall be sixteen fathome deep, and good soft ground. If you anker otherwise then upon these foresaid markes, you shall have bad, stony, and sharp ground. It hath happened that some ships have anchored there, but their anckers fell so into the rockes, that they could not weigh them againe, but must hew off their cables, and

C. Porques.

Markes of
the road be-
fore Tetuan

and leave their anckers behind them. Therefore if you come off from the point of Cape Porques, then be carefull that you bring the foresaid first little hommock (which lieth a stearne of you in the bight of Seuta to the southwardes of Seuta) a little without the Cape Porques, and so keepe failing to the southwardes, and keepe heaving of the lead continually without ceasing, untill that you get the soft ground, so soone as you shall feele it, let then presently your ancker fall, for the place where the soft ground is, is not two cables lengths in compasse great.

Tetuan lieth from Seuta about six leagues, and three or foure leagues to the southwardes of it lieth a point called Cape Tetuan, whereupon standeth a tower. He that hath never been at Tetuan, might easily be mistaken by that point taking it to be Cape de Porques, the sooner because that some say that Tetuan lieth at least nine leagues to the southwardes of Seuta. It hath happened that ships have sailed unto this point, and have so runne past Tetuan, therefore it is best that men goe not to farre from the shoare either by night or by day for to get the Cape Porques certainly in sight.

The Bay of Tetuan betwixt the Cape Porques, and Cape Tetuan, is a sand-bay altogether of sand strand with low hommocks here and there upon the sea side, which a farre off seeme as if they were shippes, but the ground thereabouts is altogether fowle, except such a place as before is said. Betwixt the Cape Porques and Seuta it is also a faire sand strand, but thwart of it is all good ground.

of the tydes.

IN the narrow of the Strait maketh high water a southwest and by south moone. The current runneth more to the westwards then to the eastwards; when it is faire weather there goeth commonly four houres flood to the eastwards, and eight houres ebbe to the westwards; but the most part of the time according as the wind is, and at sometimes the current runneth so strong, that it rippleth as if there were showlds.

From Cape Trafalgar to Tariffe the course is southeast 4 leagues.

From Tariffe to the point of Gibraltar e. & by n. 5 leagues.

From the point of Gibraltar to Marveles northeast and by north 12 leagues.

From Marveles to Fangerola the course is eastnortheast 5 leagues.

From Fangerola to the west point of Mallaga eastnortheast 2 leagues.

From the west point of Mallaga to the towne of Mallaga northeast and northeast and by north 4 leagues.

From the point of Gibraltar to Mallaga northeast 23 or 24 leagues.

From Mallaga to Velez Mallaga east & east by north 7 leag.

From Velez Mallaga to Almunecar east 15 or 16 leagues.

From Almunecar to Salobrenna east 4 leagues.

From Salobrenna to Modrill east & by north 2 leagues.

From Modrill to Cape de Sacrafty eastsoutheast 1 league.

From Cape de Sacrafty to Castell de Fierro east and by north 4 leagues.

From Castell de Fierro to Adera east 8 leagues.

From Adera to Almeria northeast 5 leagues.

From Almeria to Cape de Gat s. e. and by east 5 or 6 leag.

From the point of Gibraltar to Cape de Gat east and by north 66 leagues.

From the Cape de Spartell in Barbary to the point of Ape-hill, the course is eastnortheast 8 leagues.

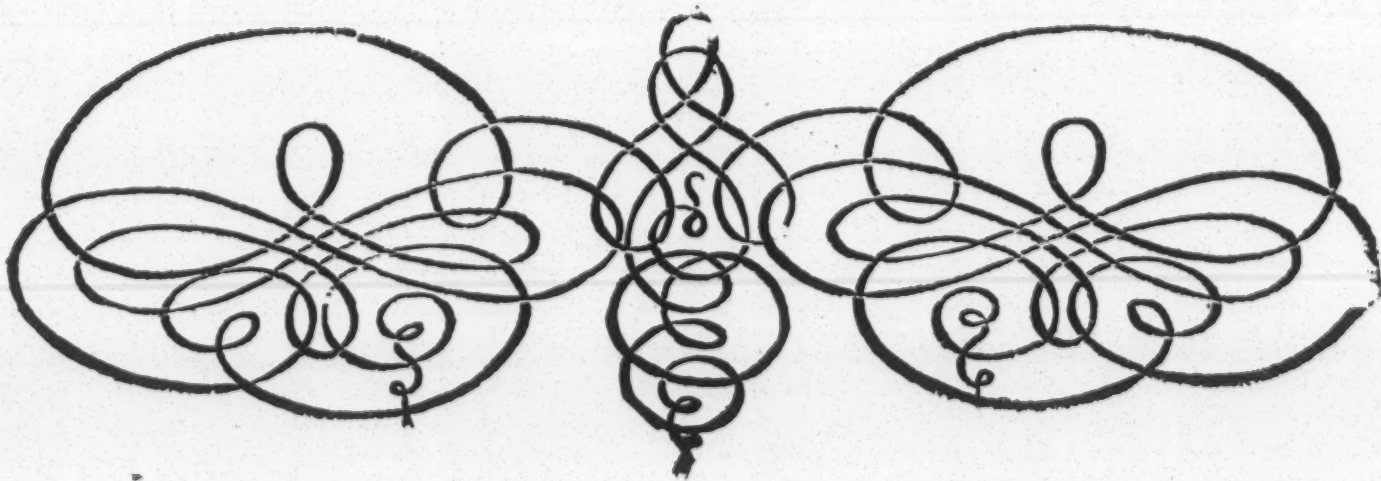
From Ape-hill to the point of Seuta southeast and by east 2 leagues.

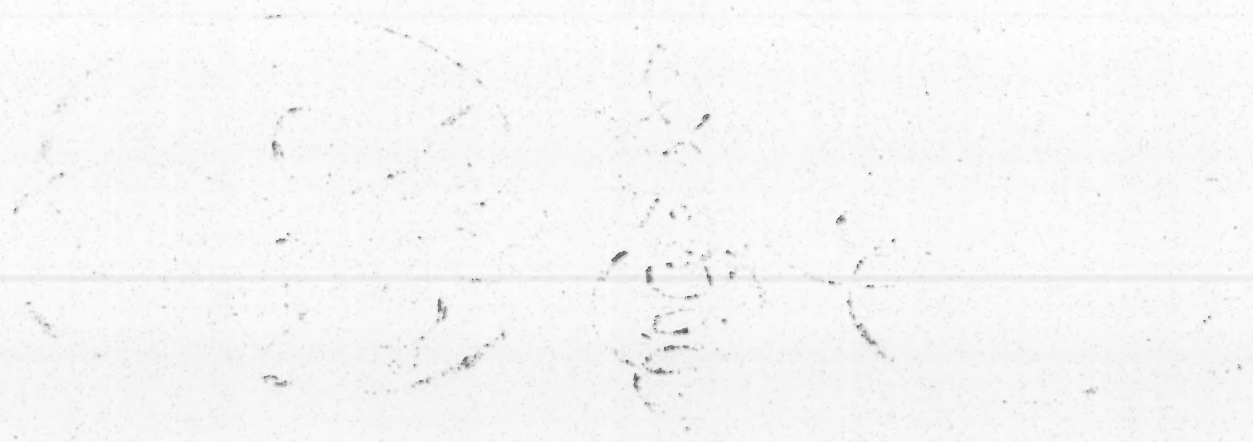
From the point of Seuta to the road of Tetuan south 5 or 6 leagues.

Heights.

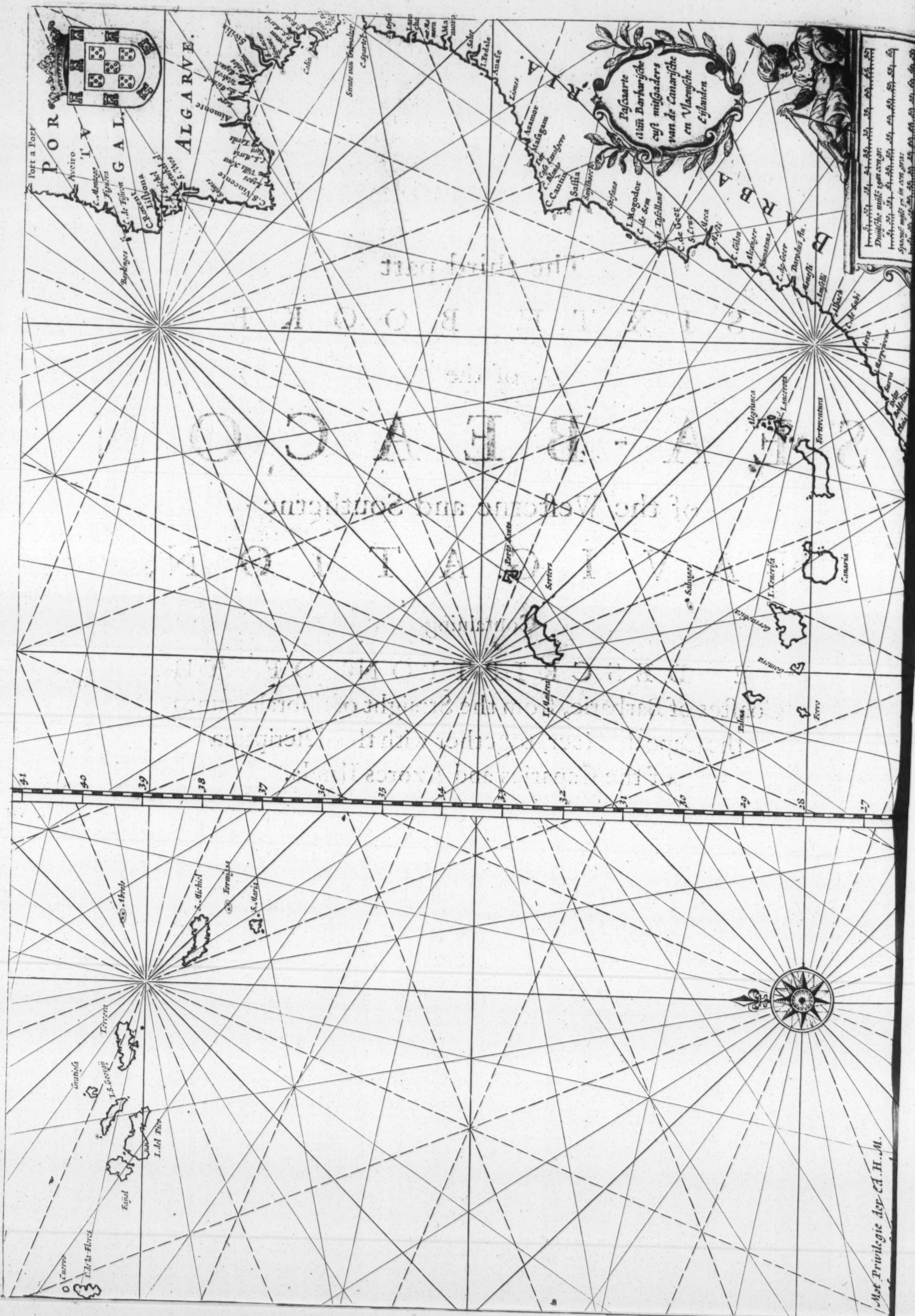
THe middest of the Strait of Gibraltar lieth in 35 degr. and 50 minutes.

The end of the fifth Booke.





The third part
S I X T H B O O K E
of the
S E A - B E A C O N
of the Westerne and Southerne
N A V I G A T I O N,
Containing
T H E D E S C R I P T I O N O F T H E
Coastes of Barbarie, from the Straight of Gibraltar unto
the Cape de Geer, together with the description
of the Canaries and Azores Ilands.



Met Privilegie der E. d. H. M.

Alm

THE SIXTH BOOKE

of the

WESTERNE

NAVIGATION,

Contayning the Description of the Coastes of Barbarie from the
Straite of Gibraltar untill past the Cape de Geer: together
with the Canaries and Azores Ilands.

C H A P. I.

The Coast of Barbarie from the Straite to Cape Cantin.



He Coast of Barbarie in the Straite of Gibraltar, lieth from Seuta to Cape de Spartell, west and by south, and west-southwest eight or nine leagues. But the Cape de Spartell and Cape de Trafalgar on the Spanish side, ly north and by west, & s. & by e. 8 leagues asunder.

Arzila.

From Cape de Spartell to Arzila, the coast lieth south & by west seven leagues; betwixt them both alongst the sea side, it is all low land, with some points and high land within, with a white sand-hilly strand. A little to the southwards of the point of Cape de Spartell, men may ancker for easterly windes in twelve or thirteene fathome, cleane sand-ground, but so soone as the wind doth shift to the west, they must be ready to get under saile, lest they bee inbayd upon a lee shoare.

About a league to the southwardes of the Cape, lieth a little hommock upon the low land, by the water side, which sheweth (in sailing by) like a broken schonce or castle.

Arzila is a little walled towne lying upon the water side, and hath a little bard haven, which men doe saile into at two places, through a row of rocks, which lieth before it; the northermost channell is the deepest, but both of them are not fit but for small ships. Being come within the rocks, men doe ancker betwixt the towne and the rocks.

From Arzila to Alarache the coast lieth also south and by west eight leagues, it is altogether a cleane coast with some rocks on the shoare, the land betwixt them both is somewhat higher then betwixt Arzila and the Cape, with high land within. About an English mile to the southwards of Arzila standeth a tower, and somewhat further to the southwardes, upon the high land, stand some little houses, but men cannot well see them, except they saile very close alongst by the coast. Betwixt Arzila and Alarache but somewhat neerer Alarache then Arzila, lieth on the sea side, a high white cliffe which is very good to be knowne, betwixt that cliffe and Alarache standeth upon the high land a very high tree, with some other trees by it, when men come from the northwardes alongst by the shoare, that great tree seemeth to be a Tower, yet somewhat to the southwardes standeth an other great tree, but not so great as the other: when men begin to come neere to Alarache, or els by the southwardes great tree, then the foresaid greatesse tree doth hide it selfe behind the land. These are all very good marks for to know this coast by, betwixt these two places.

Alarache.

Alarache lieth with a great Castle upon the south point of a river, which is very showld and crooked, the north point is a low point going flat off, and within it, on the north side of the river standeth also some buildings. Before the river lieth a barre of quicksand, which lieth off from the north point, where the ships may go in over with a spring tyde, through a Crieck, els it is but for Barks and Frig-

gats: Men may ancker before it in the Roade in sixteene, seventeene, and eighteene fathome.

Alarache is under the command of the King of Spaine, and is little or nothing used either by Englishmen or Dutchmen.

He that saileth alongst this coast, must not come very close to the shoare, unlesse it were with a hard Levant, or easterly wind, with calme weather there goeth sometimes a very great growne sea out of the west or northwest, so that sometimes men can hardly get off from the shoare.

From Alarache to Old Mamora the coast lieth south & by west, and southsouthwest betwixt seven and eight leagues, it is low land with sandhills with few places that are good to be knowne, all alongst even to Mamora.

He that commeth out of the sea, and falleth with the land here on this coast, shall perceiue little knowledge of the land, unlesse hee fall with some of the inhabited places. This Old Mamora was wont also to be a haven, but is now altogether cast to of the sea.

From Old Mamora to Mamora the coast lieth alongst south and by west, and southsouthwest seven leagues. Before Mamora is a high broad sand-strand, and is not good to know, when you are somewhat off the land. The best knowledge thereof is this. When you come from the northwards alongst the shoare, you have all high land within, that you shall leese when you come before Mamora; and when you come from the northwards, you cannot see the river of Mamora open before you bee past it, by reason that it lieth in to the eastwardes, and the north point is low. When you come somewhat close by the shoare, you shall see upon the high land in the Castle of Mamora (which the Spaniards have built there for their defence of the place) a very high mast or stake, which you may see indifferent far off, and when it is cleare weather you may see also the high thick tower of Sallee to the southwardes stand against the land. Before the River lieth a Barre which with a Spring hath fixteene and seventeene foot, and sometimes more water; the Barre is oftentimes altered by the sea. In the Spring it lieth in commonly eastsoutheast, and thereabouts. In the later part of the yeare it lieth in more easterly by the casting up of the sea out of the north. In the Summer the windes blow alongst the coast, the most part of the time out of the north, which causeth that the current runneth there to the southwardes, and in the Winter they blow much and strong out of the southwest, and westsouthwest. In the Winter men must bee very carefull to get off by times, when the wind beginneth to come to the south, or south-east, then it is time to get off, for then commonly it shifteth to the southwest, and westsouthwest with fowle weather, but when it commeth about againe to the westnorthwest, or northwest, then it is like to be good weather againe.

The road before Mamora is about a league from the land in eighteene and twenty fathome, there is cleane sandy-ground.

From Mamora to Salley the coast lieth southwest and by south, and southsouthwest six leagues; betwixt them both

T 3

it is

it is low plaine land, and sandy-strand. With double land within, which is so even and smooth, as if it were planed over. From Mamora not halfe wayes to Salley, the strand ceaseth, and from thence forth to the southwardes it is a shoare all of black steepe ragged rockes with little hills, so that men cannot judge (when they are somewhat off the land) that it is double land within, by the plaines of it. When you are a league or two past Mamora, then you may see very plaine the high thick tower of Salley, and when you see the foresaid rocky shoare, you may be sure that you are past Mamora, that steepe rocky shoare continueth from thence, untill past Fedalle, yet betwixt Fedalle and Salley is here and there a place of white strand, betwixt the rocks, but to the northwards of Salley it is not so, but nothing els then perfect rocks.

Salley.

Road before
Salley.

Fedalle.

The towne of Salley hath a little tower, and lieth upon the north side of the river, which is a low plain point of sand. The castle hath also a little tower, and lieth over against upon the south point of the river, which is a high rocky point. There goeth a wall round about the high thick tower, and lieth upon a point on the south side within the River. Before the River is a Barre which oftentimes with stormes out of the sea doth alter and shift, and is cast too, sometimes the channell runneth by one of the two points, and sometimes againe right in the midst of the river's mouth. Hee that will ancker before Salley, let him bring the foresaid high thicke tower (which standeth within on the River) over the point of the Castle, to wit, over the south point of the River, which shall then stand from him neere about southeast, and ancker in thirty, eight and twenty, foure and twenty, twenty, eighteen or sixteen fathome, so neere or farre off as hee will, there is cleane black sandy ground, neverthelesse that the shoare thereabouts is so full of rockes and stones. Being come to ancker there men must shoot a shot to cause the Moores to come off. From Salley to the Iland Fedalle the shoare lieth alongst southwest and by south about nine or tenne leagues, betwixt them both ly here and there in the sandy strand, long black rocks (as before is said) so that oftentimes men might take it to be Fedalle. The best marks for to know Fedalle by is a wood of trees about a league to the northwardes of Fedalle, which standeth below upon the land, & sheweth like a barne. When you come sailing alongst close by the land, you shall see it above upon the land, but when you are somewhat off from the land, then you shall see the land within, above the wood of trees, or Barne (as men doe commonly name it for the likenesse of it) also there lieth a little round hommock about foure leagues to the northwardes of Fedalle, which you shall see above the rest of the land, when you are somewhat off from the land: but when you come close by the land, it hideth it selfe also behind the double land. The coast betwixt Salley and Fedalle, is very plaine and smooth double land, so that there is not another such hommock more betwixt them both, as that foresaid hommock, and in regard the coast thereabouts is altogether so plaine, without any places good to be knowne, therefore men must take the more speciall heed unto such small markes, for not to faile past the place where they are bound unto.

Monfor.

had under
Fedalle.

Betwixt the foresaid Barne or wood of trees and Fedalle standeth also a ruinous little Towne fallen down, in a rough wood called Monfor, when you faile alongst close by it, you shall see yet some peeces of walles of it.

To the southwardes of Fedalle the land is againe higher, and where the high and low commeth together, it doth make a clift, thereby the Iland of Fedalle is good to be knowne; when that clift is southsoutheast from you, then is Fedalle thwart of it also southsoutheast from you. If you will goe into Fedalle, then runne right with the foresaid Barne, or wood of trees; untill you come within a league, or somewhat neerer to the land, and then alongst by it, and so you shall not misse the Iland Fedalle, but runne in betwixt it and the maine land, when that you come by the north point of Fedalle, then ancker betwixt the strand and the foresaid north point, but much neerer the Iland Fedalle

then the strand in six, seven or eight fathome, so that you come to ly with your ship so farre in, that the foresaid point of the Iland doe ly northnorthwest from you, then lieth the foresaid Barne eastnortheast from you, and Monfor a handspikes length to the northwards of the Barne or wood of trees; you may also ancker in twelve fathome, so that the point of Fedalle ly west and by south from you.

This bight within the Iland Fedalle, is a very bad place to ly in, for although you ly there so, that the point of the Iland ly northnorthwest, and north and by west from you, and with a cable on the Iland, neverthelesse the growne sea commeth so hard rowling in about the point of the Iland (when the wind is westerly) that you might rather desire to ly in the open sea, then within the Iland. From the north point of Fedalle shooteth off a ledge or riffe of rocks a musket shot into sea, the most of them ly high above water; within the Iland it is very flat towards the strand, the Bay on the land is a faire sandy strand, there men may get ballast from the shoare, but they must be very carefull to stand upon their guard, for there are dangerous people.

Before Fedalle, to wit, to the northwardes of it, thwart of the wood of trees, & all alongst to Salley, it is all showld water a league or two from the land, all alongst that distance off, it is not deeper then three and twenty, foure and twenty and five and twenty fathome cleane sand-ground, thwart off into sea from Fedalle it is also of the same depth, but fowle ground.

Depths and
grounds
about Fe-
dalle.

Hee that will trade at Fedalle must ancker somewhat far in, for they have there no Boats, men must fetch the Moores aboard with the Boat.

Vpon the north point of Fedalle lieth a high hommock, which sheweth a far off when men come in, as if it were a Castle fallen downe, but it is nothing else then rockes. At the south end of Fedalle men may goe over on foot at low water to the maine land, but at high water the sea floweth through at two places. It floweth there seven and eight foot up and downe.

Three leagues southwest and by south, and southwest from Fedalle lieth an old ruinous towne fallen downe close upon the strand called Anafee or Anfee, it is a long towne with many towers, amongst the rest one high thick tower almost like the tower of Salley, but men must bee indifferent close by it before they can see it. When you are thwart of Anafee, you may yet see the wood of trees to the northwardes of Fedalle, which standeth then to see to from farre as a faile in the water. Two leagues to the southwardes, (or rather to the westwardes) of Anfee, or Anafee, is a steep point with red cliffes, which seeme a farre off as if they were houses, such spotted men shall finde at divers places on the coast.

Anafee.

From Anafee to Azamor the coast lieth southwest and by west westerly eighteen leagues, betwixt them both lieth another fallen place called Lyones. Azamor hath a point lying out on the east side, when you come sailing alongst the shoare from the northwards, Azamor lieth then about or behind that point upon the strand, but standeth high. A little past Azamor lieth a river, and thereabouts are some towers in the low land.

Azamor.

Three little leagues to the westwardes of Azamor lieth the towne of Masagam, on a white strand close by the sea side, this towne is inhabited by the Portugalls, or Spaniards, it hath no towers, and sheweth to see too, off at sea, in white spots against the land. When you are thwart off from it, you shall see to the southwardes the high tower of Tyto (which is a towne fallen downe about two leagues to the westwardes of Masagam) almost like the tower of Anafee. A little to the westwardes of Masagam, at the west point of the Bay, shooteth off a ledge or riffe of rockes, almost a league off into sea, whereof the rockes at high water, ly most under water, and at low water are uncovered. He that will ancker there, and is not well acquainted, must take in a Pilot, which may bring him to a place where is good ancker ground, for although that it be a great Bay, yet neverthelesse there are few places where the ground is clean; but is at many places fowle, so that but few shippes shewld be able to

Masagam.

Tyto.

able to ly there in cleane ground. When you ly in the right road, then lieth the east point of the Bay east, and the west point about northwest from you.

About a league to the westwards of Tito, lieth a steepe point, when you come from the eastwardes alongst by the shoare, you shall see no more land without the point, untill that you come neere it; when you begin to get it upon your broad side, then there commeth out to the westwardes a great square cliffe, which is very good to be knowne, and is whitish with reddish spots, and seemeth a farre off as if it were a wall. This point is called after that white point, Cape Blanco. About three leagues to the westwards of this Cape Blanco, lieth a little tower upon the high land, neere by a valley called Casa Cavalgera, and two leagues more to the westwards, lieth upon the high land another little house called Emindra, but you must be close by the land before that you can see it. From the foresaid Cape Blanco to the Cape Cantin, the coast lieth westsouthwest, and southwest and by west about nine leagues.

C. Blanco.
Casa Cavalgera.
Emindra.
C. Cantin.

Of the tydes.

ON these foresaid Coasts maketh high water a south-southwest, and southwest and by south Moone.

Courses and distances.

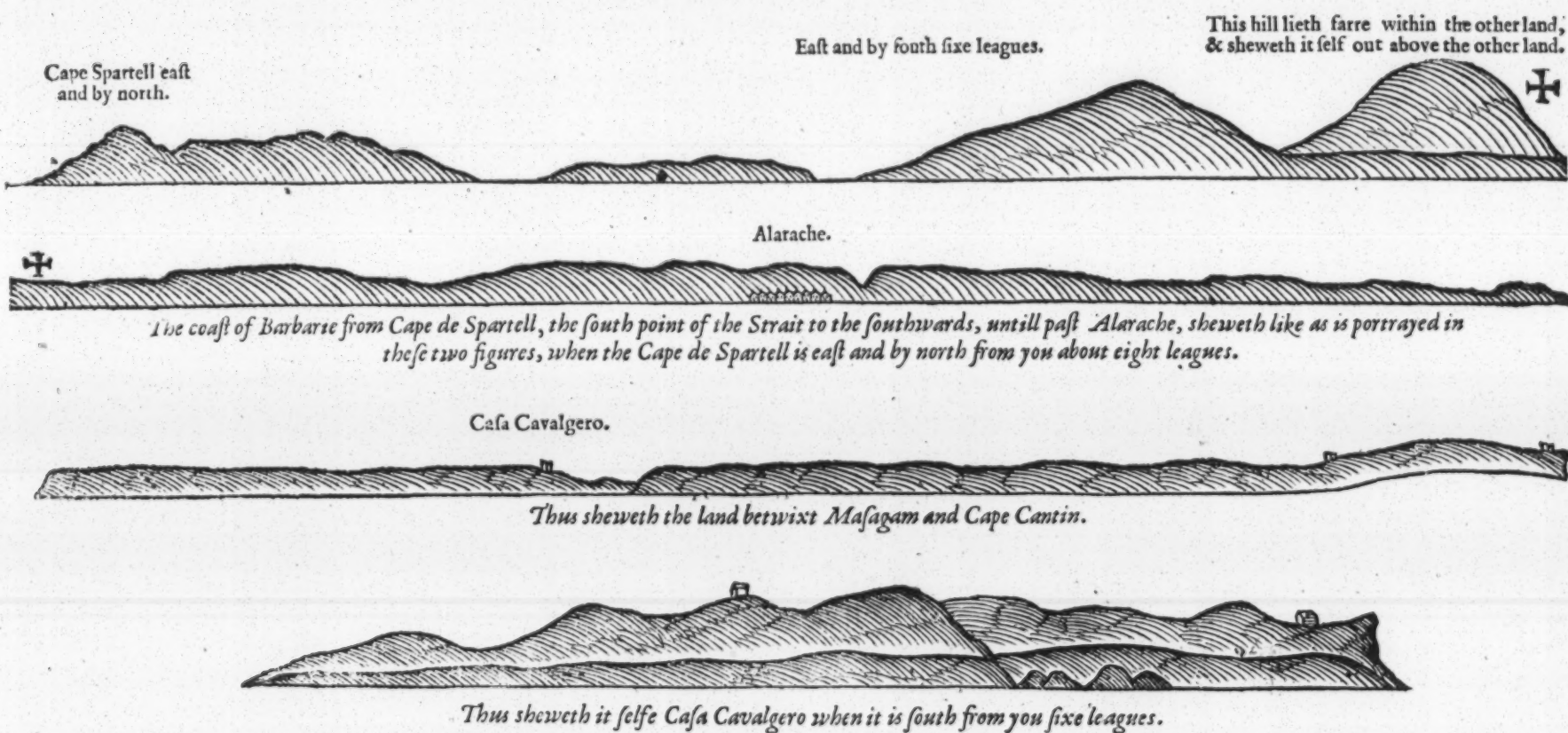
How the one place lieth asunder from the other alongst this coast is here before described.

From C. Spartell to C. Cantin it is s.w. southerly 80 leag.
From C. Spartell to Madera w. & by s. & w.s.w. 200 l.
From C. Cantin to Madera west 133 leagues.
From C. Cantin to C.S. Vincent n. somewhat westerly 90 l.
From C. Cantin to Teneriffe, s. w. and by west 142 leagues.

Heights.

Cape de Spartell lieth in 35 degrees 32 minutes.
Masagam lieth in 32 degrees 46 minutes.
Cape de Cantin in 32 degrees 35 minutes.

How these lands doe shew themselves at sea.



CHAP. II.

The Coast of Barbarie betwixt Cape Cantin and Cape de Geer.

THe Cape Cantin is an even plain point, when you are to the northwards of it, it sheweth flat towards the west, & going off towards the sea: there standeth a fire-tower upon it, but very small, that sometimes you can hardly see it. If you come from the northwardes, or from Cape Vincent, and are bound to Saffia, then set your course south and south and by east, and then you shall fall with the land foure or five leagues to the eastwards of Cape Cantin, or if you saile a more westerly course, you shall runne till you come in the height of two and thirty degrees and a halfe, and then the Cape Cantin shall ly due east from you, it is better to fall a little to the eastwards of the Cape, then to the westwards of it, because the windes blow there most commonly northerly. If you fall to the eastwardes of the Cape, the coast lieth there southwest and by west, and west-southwest, and it is even plain land. About ten leagues to the eastwardes of the Cape, lieth that little towne Tyto, with a high white tower upon the sea side, and five or six leagues more to the westwards (betwixt Casa Cavalgero & Cape Cantin) you shall see a little bight or bay, thereabouts ly upon the strand by the water side, great black rocks, which shew as if they were wrackes of ships, & then forth alongst to the Cape it is a faire flat sandy strand. From

the Cape shooteth off a ledge of rockes somewhat off into sea, which men must avoid when they saile about the Cape.

From Cape Cantin to the north point of Saffia, the coast lieth south, or somewhat more westerly five or six leagues, betwixt them both it is a steepe rocky land without sandy strand, but above upon it plaine and even. A league to the southwards of the Cape lieth a riffe or showld by the shoare, by some called the Gold-banke, and lieth about a league off from the land: at sometimes of the yeare there is much fish to be taken.

About a league by north of the north point of Saffia ly three little Ilands hard under the wall, a little southwards there standeth a little towre betwixt the rocks and the land, bring that towre and the northermost of the three Ilands, over on, then men may saile through betwixt the riffe Gold-banke and the fast land.

To the southwardes of the bay of Saffia is high uneven, Saffia, and most all double land, but to the northwardes of it, it is even and plaine, thereby men may easily perceive or discern, wether they be to the northwardes of Saffia, or to the southwardes of it.

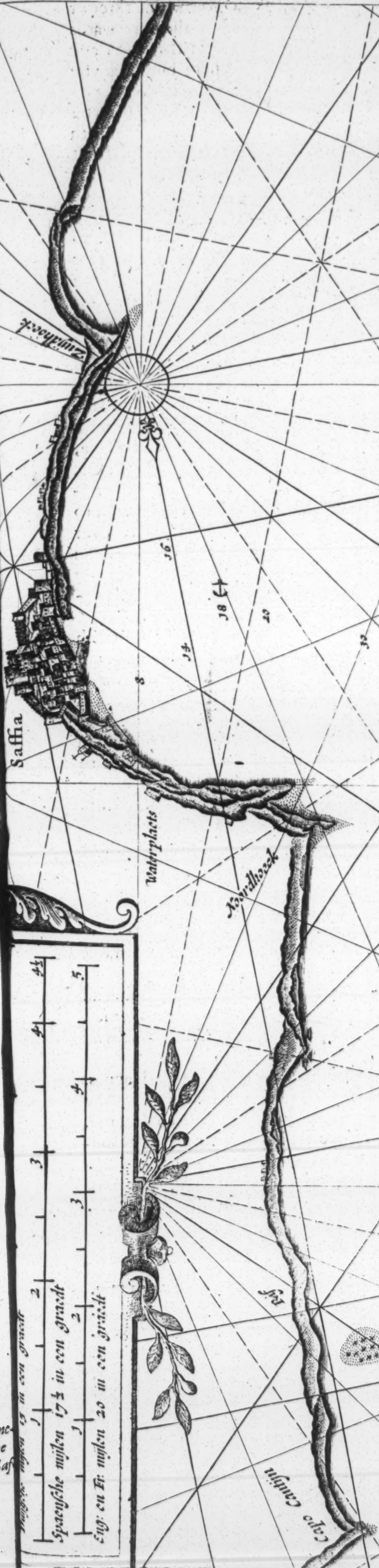
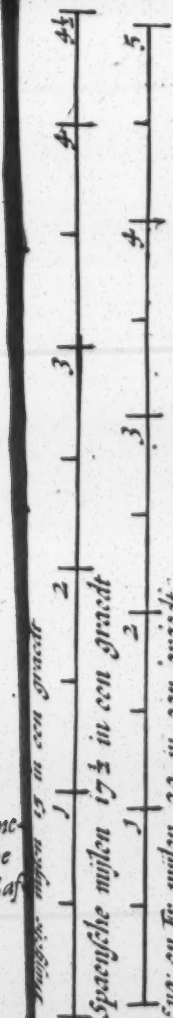
If you will ancker in the Bay or Road before Saffia, then bring the north point (whereupon standeth a tower) a little more westerly then north from you, & ancker then in eighteene fathome. Or if you will ancker further in the Bay, then bring the foresaid north point northnorthwest, or a little more northerly from you, and then the northermost of the two north points shall bee a shippes length without the southermost, or the next unto you, runne then so farre to the

to and
in the
of Saffia

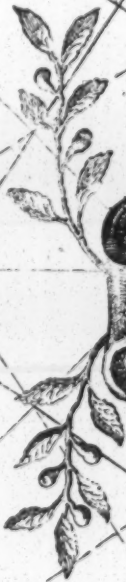
Eng: en Fr: mijlen 15 in een graadt

Spaensche mijlen 17 1/2 in een graadt

Eng: en Fr: mijlen 20 in een graadt



De Cyften van
Barbarien
van C. Cantin-
tot de C. de
Geer



I. Mogodor
C. de Scin



Duytsche mijlen 15 in een graadt

Spaensche mijlen 17 1/2 in een graadt

Eng: en Fr: mijlen 20 in een graadt

to the southwards untill that the tower where men doe land with the boates (which is a high square tower standing below even within the wall of the towne) come right over a tower which is fast to the wall, which commeth off from the Castle above, to the southwardes, so that the foresaid thick tower below come right over the haven, betwixt the point where the Castle standeth upon the water side, and the rocks where men goe in betwixt. Or els ancker that the high Castle of Saffia stand east and by south, and eastsouth-east from you, there it is sixteene, seventeene and eighteene fathome deepe, good fine sandy ground. You may also ancker so farre within in the Bay in fifteen or sixteen fathome, that the north point come to be northwest and northwest & by north from you. These are the Summer roades; In the Winter men must ancker further from the land in eight and twenty or thirty fathome, there the ground is course sand. Men may boldly runne in before Saffia into the road by night, there is nothing that they need to feare, which may doe them hurt, but the land.

About two leagues from Saffia, lieth the south point of the Bay, which is a low point that lieth out, and two leagues to the southwards of it lieth another steepe rocky point, without sandy strand. By it goeth in the River Tanfit up into the land unto Marrocos.

From the point of Saffia to the Iland Mogodor the coast lieth southsouthwest nineteene or twenty leagues.

Iland Mogodor.

Against the northeast end of the Iland Mogodor, there shooteth off from the maine land, a great row of rockes, being hard sharpe rockes, whereof the outermost, or those that ly next to the Iland Mogodor, ly high above water: He that commeth from the northwards, and will faile in behind the Iland Mogodor, must runne in betwixt the Iland and the foresaid rockes, close in alongst by the rockes. It is there in comming in betwixt the Iland and the rocks five fathome deepe. Within the foresaid rockes ly also some other rockes on the larboard side, which at high water are under water, and at low water are uncovered. When you come to the end of them, you may luffe up about by them towards the maine land, and ancker there within them in three fathome at low water, there is good sandground. But yet neverthelesse it is not there very good lying, for by reason of the breaking of the sea upon the foresaid rocks, there goeth sometimes a great sea, so that it is not good lying there with a storm, but further in, under the Iland it is good lying in two fathome and a halfe. From the south end of the Iland lieth off a little riffe towards the maine land almost to the foot strand, and to the southwards of that foresaid little riffe, lieth a banck off from the maine land, almost a league off into sea. If you will faile out at the south end, then runne alongst by the shoare of the maine land, untill that you be about the foresaid riffe, and runne out then upon your lead alongst by the banck, and then you shall presently get deeper water, of foure, fixe, eight, and ten fathome, and then you may faile there, where you desire to be.

C. de Geer.

From the point of Saffia to Cape de Geer, the course is southsouthwest about three and forty leagues, but from Mogodor the same course about two and twenty or three and twenty leagues. It is there betwixt them both a faire flat sand-strand, with double land, which at some places is very high.

Cape de Taffalana.

About eight leagues to the northwards of Cape de Geer lieth a point called Cape de Taffalana, under which men may ride in good sand-ground for east and northeast winds. The Cape de Geer is lower then the land to the northwards of it, and falleth to the southwardes flat off into sea, which

men shall first perceive when they come within three or foure leagues of it. About foure leagues to the northwards of the Cape lieth a high hommock within the land, and further northwardes the land is yet higher; but when you come thus from the northwards neere Cape de Geer, you shall see no more land to the southwards of it. When you come to the point you must give the riffe a birth that lieth off from it, and runne about by it, and then forth southeast and by east, and southeast seven or eight leagues to S. Cruz, and then you shall see the Moores Castle stand on the high land: thwart of it lieth a row of rockes, about a Calliver shot in length, els it is all a cleane and cleare coast. For to ancker there in the Bay, runne so farre into the Bay, that the foresaid Moores castle stand north from you, and the Christians packhoufes northeast, there it shall be deepe (to the southwardes of the foresaid row of rocks) seven & eight fathome, the north point or Cape de Geer, shall then be from you northwest and by west, there is the best road. In the Summer time you may ancker neerer to the shoare, untill you come in fixe and seven fathome. When you saile from Cape de Geer towards the Playe or the road, you must bee carefull to keepe close aboard of the land of the Cape, and runne alongst by it, untill you come before the Castle. If you runne farre off from the shoare, you shall with northerly windes (which blow there much) be constrained to come in northeast and northnortheast againe for to recover the shoare, therefore it is best to keepe close aboard the high land. Hee that shold come into the road here by night, must not (upon a certain great forfeiture) come neerer the shoare then in twelve or thirteene fathome.

Riffe Cape de Geer.

Road before S. Cruz.

In this road men must be very carefull and ready with their anckers, the smallest bower must be alwayes laid out for the wind, which bloweth off the land, and the other anckers to seawards. The shoot ancker must also bee alwayes ready against a storme (which men may very well perceive before by the swelling or rising of the sea) to bring it out in the southwest. Also it is needfull to keepe the foresaile to the yard, for to helpe themselves with it the best that they can, if it shold happen that they shold be forced from their anckers.

In this Bay is much fish to be taken, when men ly there in the road, they take their turnes to goe out to fish.

Courses and distances.

From Cape Cantin to Cape de Geer southsouthwest 50 or 52 leagues.
 From Cape de Geer to Cape de Non southsouthwest, and south and by west 27 leagues.
 From Cape de Geer to the point of Saint Cruz, southeast 5 leagues.
 From Cape de Non to Offin south 13 leagues.
 From Cape de Non to Cape de Bajador southwest and by west 69 leagues.
 From Cape de Geer to Cape de Bajador southwest somewhat westerly 93 leagues.
 From Saffia to Madera east and west 130 leagues.
 From Cape de Geer to Madera westnorthwest 133 leagues.

Heights.

Cape de Cantin lieth in 32 degr. 32 min.
 The Iland Mogodor in 31 degr. 8 min.
 Cape de Geer in 30 degrees.
 Cape de Non in 28 degr. 32 min.
 Cape de Bajador in 27 degrees.

How these lands doe shew themselves at sea.

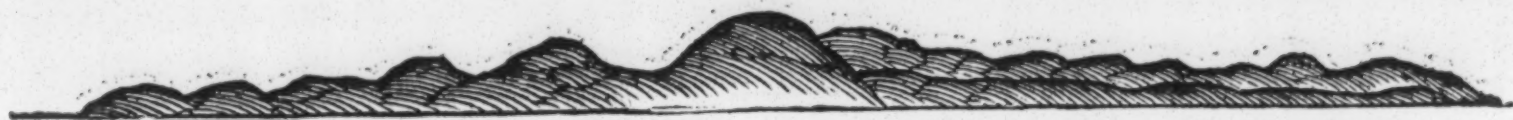


When the north point of Saffia lieth southsoutheast five leagues from you, it ariseth in this forme.

When



When Cape Cantin is northeast and by east six leagues, and the point of Saffia eastsoutheast foure leagues from you, then they shew themselves thus.



Thus sheweth the land to the southwards of the south point of the Bay of Saffia when it is eastsoutheast three leagues from you.



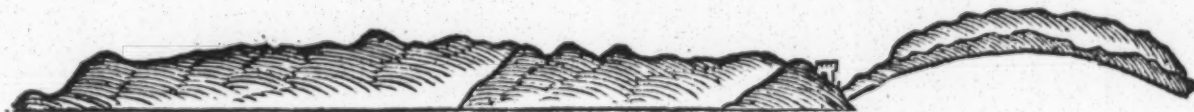
Mogodor.

When you are westnorthwest, or thwart off from Mogodor, three leagues, the land sheweth it selfe thus. It is a high and double land.



C. Taffelana.

When the Cape de Taffelana is northnortheast three leagues from you, the land sheweth thus unto Cape de Geer.



C. de Geer.

When the Cape de Geer is northnorthwest three leagues from you, it sheweth thus, and then the Bay is east and by south from you, the land is with sand-hills.

C H A P. III.

Of the Canaries Ilands.



He chiefeft Ilands of the Canaries are seven in number, Lancerota, Forteventura, or Porteventura, Great Canaries, Teneriffe, Gomera, Palma, and Ferro.

The Iland Lancerota lieth from Cape S. Vincent southsouthwest distant about 165 leagues. It hath one haven upon the northeast end, betwixt the two Ilands Alagranca and Gratiofa, where men may come in from the northwardes, and ly landlockt for all windes, it is deepe there ten, fifteen, and twenty fathome, and they may saile out againe to the southwardes alongft by Lancerota.

At the east side of Lancerota is a good road before the Towne of Lancerota, there lieth a banck to the northwardes of it, which men must avoid, and runne about to the southwardes of it, there they may ancker in ten, eleven and twelve fathome.

On the same southeast side ly also two bard havens, a great shot of a cast peece, one from the other, the northermost is called Porto de Naos, and the southermost Porto de Cavallos, which wee have demonstrated in a large volume in the northwest corner of this Card, and shewed the depths with numbers of feet at high water and spring tyde.

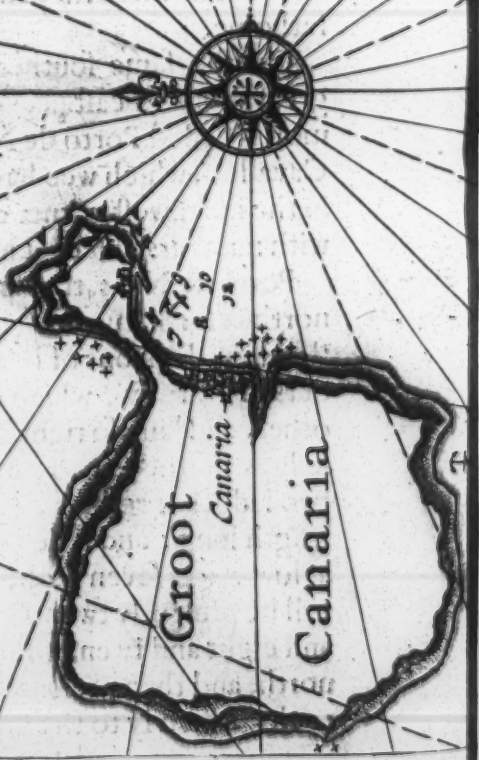
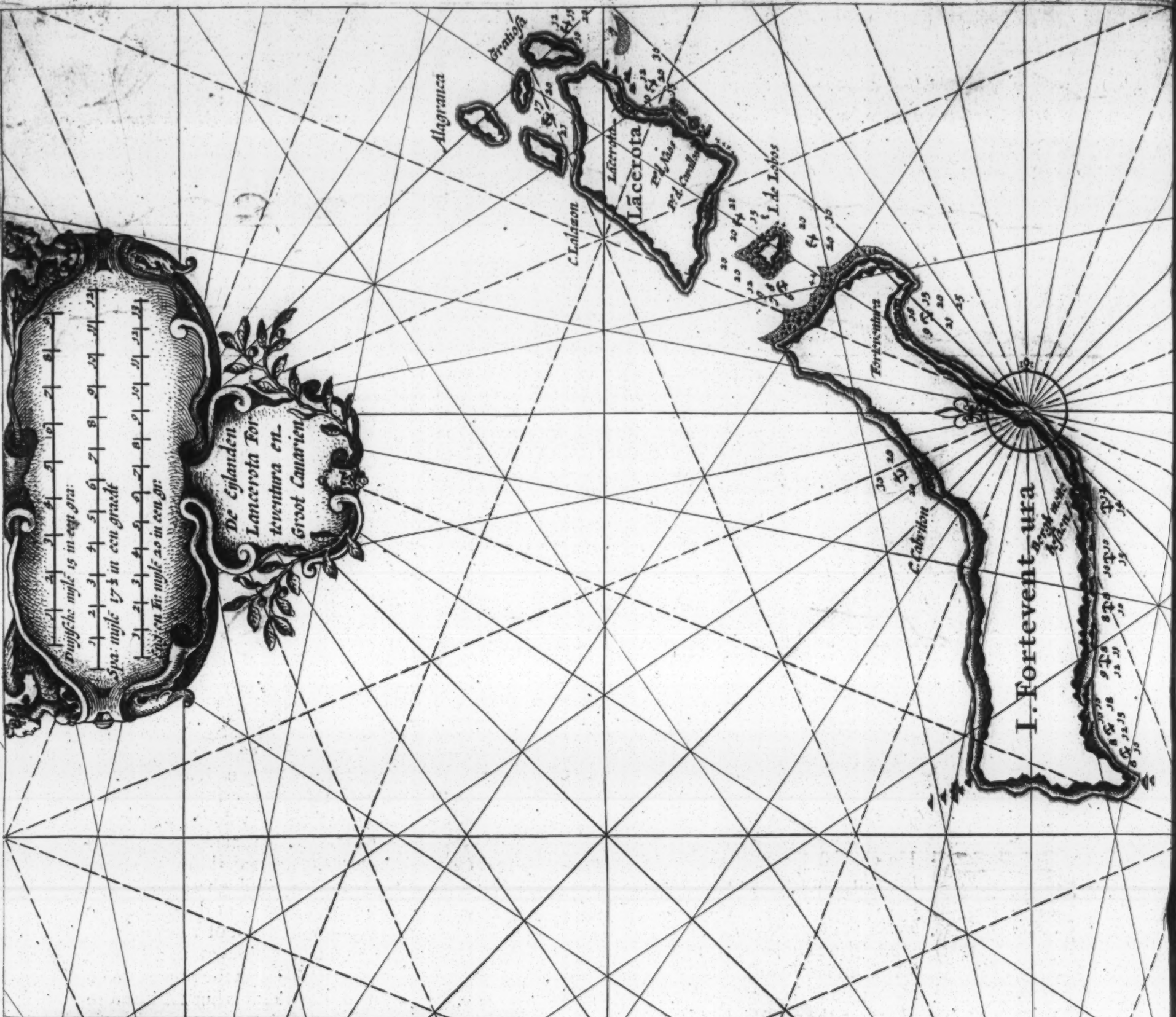
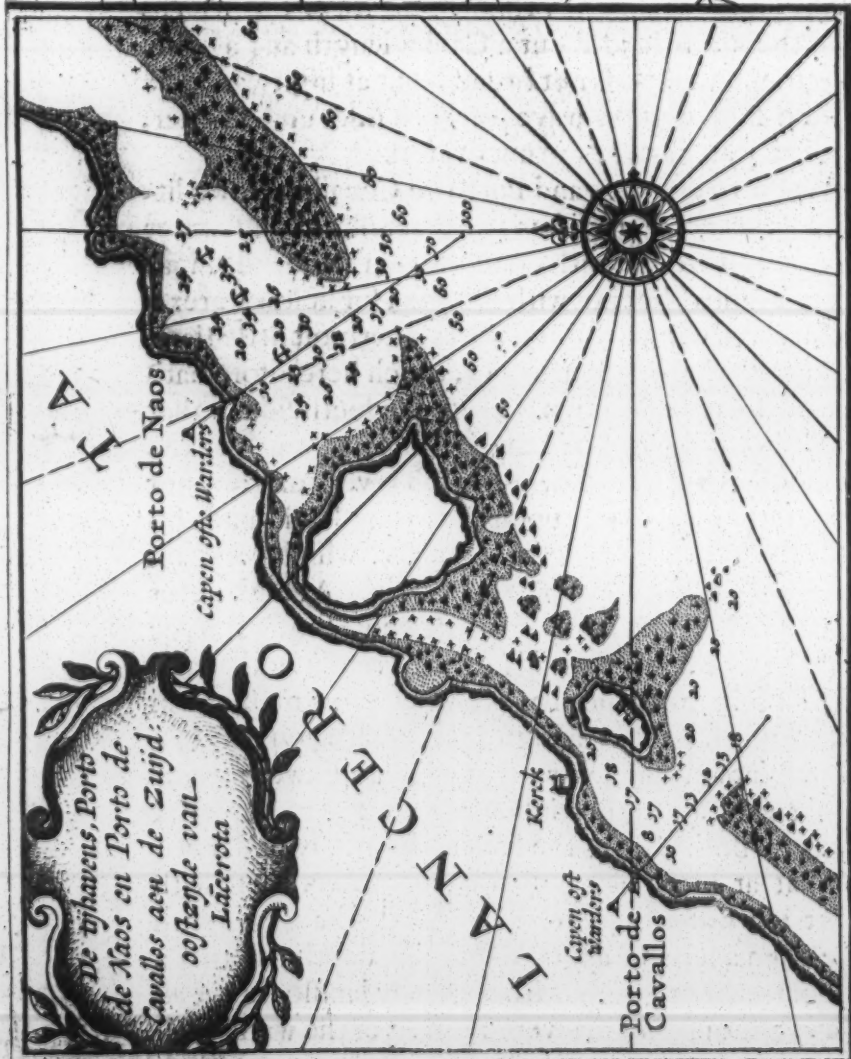
Porto de Naos.

Porto de Naos, the deepest of these bard havens goeth in northwest and by north betwixt two ledges of rockes, there stand two beacons of heapes of stones in manner as the warders in Norway, which you must bring and keep one in the other, and saile so right in through betwixt the two foresaid ledges of rockes. The shouldest of the Barre betwixt the two ledges of rockes, is but a short space, a great shippes length long, and is deep at high water seventeen foot, and at low water seven foot, so soone as you shall be over, it will be presently twenty, foure and twenty, fixe and twenty, and eight and twenty foot deepe, then you must edge up north, and then presently northeast, and ancker behind the rocks, which ly to the northwardes of the Barre, in the chan-

West. Water. vj. Booke.

nell the ground is rocky, hard, and uneven. If a s come to strike there, she shold presently be broken. The ledge is so without, as it is within, very steep, so that you may come very close unto it, where the anckers stand marked, it is altogether cleane sandy-ground, thirty, foure and thirty, and five and thirty foot deep at high water. With a sea wind there can goe here a great sea, but that happeneth seldom, for the windes do blow most out of the north and northeast, and therefore it is almost alwayes there smooth water. This haven is very narrow betwixt the rockes, which ly to seawards of you and the shoare, it is but a little more then a great Cables length broad, and from the havens mouth to the maine land about a Cables length and a halfe. The havens mouth also is not broad, but at high water the rockes doe flow a good wayes on both sides under water, which at low water againe are uncovered.

Betwixt Porto de Naos and Porto de Cavallos ly two little Ilands, the northermost is the greatest, at high water men may goe through with boates within the Ilands, into Porto de Cavallos, but not with shippes, for at low water it falleth dry there within. Vpon the southermost little Iland standeth an old Castle fallen downe, which heretofore hath been spoyled by Englishmen. From the south side of that little Iland shooteth off a riffe, and to the southwardes or the westwardes of it lieth in the Barre, which is very narrow, not above ten fathome broad; upon the maine land stand also two little beacons, as at Porto de Naos, which you must bring one in the other, and saile so right in. At high water and Spring tyde there is no more then twelve foot water, or a halfe foot more, the ground in the havens mouth is also hard, and nothing els then rocks, where you must goe in over, but within it is clean sandground, where you may ly a ground without any danger, with a ship that draweth ten or eleven foot water. At the highest water, the most part of the rockes on both sides of the havens mouth, ly under water, so that at many places men may goe over them with boats. At low water there remaineth in this havens mouth no more then a foot or a foot and a halfe depth, so that a shippes boat cannot go in; within men ly landlockt for all winds, and although it blow very hard, yet the water is al-



wayes smooth; In both these havens a south and by west, and north and by east moone maketh high water. Neere these havens there are no houses where Spaniards or Moores do dwell, then onely by Porto de Cavallos a little Church, where they have Masse said on Sundayes when shippes ly there. Men goe from thence betwixt the mountains to the towne, which lieth three leagues from thence. He that will come here must provide himselfe with fresh water, for there is very seldom fresh water to be gotten. Vpon this Iland there groweth neither fruite nor wine. In some good yeares it giveth out Wheat, Barley, and Orsilly, the inhabitants are Moores under the command of the King of Spaine.

Betwixt Lancerota and Forteventura lieth a little Iland called Ile de Lobos, which is on the outer side, to wit, on the northwest side, very fowle. Men may ancker on both sides of that Iland in fifteene or twenty fathome, also in fixe fathome, a shot of a cast peece southwest and by west from the west point of the Iland, there men may ly landlockt for all windes, except for a north, northwest and southeast wind. The coast of Forteventura is at the northeast end very fowle, with many riffes that ly out, whereupon the sea doth breake exceedingly.

The Iland of Great Canaries lieth from Forteventura west nineteene or twenty leagues distant. The road there lieth, at the east side of the Iland, behind the northeast point, thwart of a Castle that standeth upon a Chindle. The foresaid northeast point, is a very high point, with a long small & low sand-strand fast to the other land, so that when it is five or fixe leagues northwest or southeast from you, it seemeth to bee an Iland asunder off from the other land. If you desire to goe in there into the road, then saile about by that northeast point, alongst by the Isolettes, leaving them on the starboard side of you, untill that the Castle doe ly neere about northwest and by north from you, ancker there in eight, nine, ten, or twelve fathome, then lieth the north point northeast and by north, and the south point south-southeast from you.

At the south end of the Great Canaries is a faire sand-bay called Maspalomba, there is a good road for northerly windes, and fresh water to be gotten.

The north point of the Great Canaries, and the northeast point of Teneriffe called Punte de Nago, ly westnorthwest and eastsoutheast distant one and twenty leagues. In Teneriffe is a road on the southeast side before the Towne Saint Cruz, there is a faire sand-bay, a little to the northwardes of the Towne is the best road in twenty, or four and twenty fathome, and then Punte de Nago, the northeast point of Teneriffe lieth northnortheast from you, and the south point south and by west. When the Pico of Teneriffe is westsouthwest from you, then are you open before this road of S. Cruz, and when you ly in the Road of S. Cruz, you may see the Iland of Great Canaries southeast from you about thirteene leagues.

On the northwest side of Teneriffe lieth the road of Garrichica, from the northeast point Punte de Nago westsouthwest, and southwest and by west eight or nine leagues. He that will ancker before Garrichica, let him ancker to the westward of the rock with the crosse called the Lyon, so that the foresaid rock doe ly southeast and by east, and southeast from him, then he shall ly right before the towne, and may see right into the street of the towne, through the Cloyster of S. Dominicus, there is cleane ground in fixe and thirty or forty fathome, the Pieck lieth then over the west side of the towne; neerer to the land or to the rock then in five and thirty or fixe and thirty fathome, it is not cleane, and westwardes towardes the riffe Lapania it is also fowle ground. This is a dangerous road, therefore every one that commeth here, must be very carefull to have their anckers, cables and sailes very ready for to shift roades as soone as it beginneth to be a storme.

There is also a little haven before Garrichica, where men may ly with a few shippes. For to saile in there you must have a Pilot. On the west side of the havens mouth lieth a rock under water, but the sea breaketh alwayes upon it, you may ancker within in the haven in five or fixe fathome,

and must bring two anckers out a head to seawards, with a cable on the rocks, and an ancker out a stearne, on the land, so that the shippe cannot wend to and againe, the ground is there fowle, you must buy up your cables with buyes and caske for to keep them from the ground. This is a good haven in summer, then it is commonly good weather, but in the winter it is not good to come in there with a ship, for the growne sea out of the northwest commeth running in there sometimes so forcible & strong, that it is not possible to hold a ship, although she had ten anckers out. It hath happened certaine yeares past, that there was lost in the same haven a great many ships, and a great many houses of the same towne washed away with the great water.

Betwixt Garrichica & the east end of Teneriffe, are three lade places more for to lade wine at, as Laramela, Relecho, and Oratama.

At the southwest end of Teneriffe lieth also an other little haven or Bay, where is much wines laden, called Adeffa, there is also good lying, except it be with a southwest wind, which bloweth there open in.

From Teneriffe to the Iland La Palma, the course is west-northwest twenty leagues. On the southeast side of the Palma lieth a faire Bay, with a Towne and lade-place called S. Cruz. He that commeth from the northwards, and desireth to ancker in the Road, let him runne so farre in the Bay, untill he be to the southwards, or past the head, or the bridge, and ancker there in five and twenty or thirty fathome. In winter time men must not ancker so neere the strand because of the southeast or southsoutheast windes, for then they shold ly too neere the strand. Men ly there morred with two anckers for the sea wind, with a small ancker out a stearne for to keepe the shippe right in the road, there lieth to the eastwardes of the Towne; a high white rocke with a crosse, there is the best road. A little to the northwards of the towne, is a faire sandbay, there is good anckering in twenty, thirty, or five and thirty fathome, according as men will ly farre off, the Road is called the Ram-mell Road. When men ly in the Road of Palma, they may see the Pieck of Teneriffe ly eastsoutheast from them. The Iland Palma is very high and full of trees, whereby it is good to be knowne.

On the southwest side of the Palma is another place where men lade wines, called Tassa Corda.

About five leagues west from the west end of Teneriffe, lieth the Iland Gomera, which hath on the northeast side a good haven of ten fathome deepe, where is good lying almost for all windes, better then in any of the other Ilands, but there is nothing to lade: Men may also ancker without before the haven in twenty fathome, but they must shift roades there, as at Garrichica.

The Road of Adeffa in Teneriffe lieth right over against it, east off from it about five leagues.

The Road of Palma lieth from this haven in Gomera northwest and by north sixteene leagues.

The Iland Ferro lieth from the Iland Palma south and by Ferro west distant thirteen leagues.

Of the tydes.

ON the Ilands of the Canaries maketh at the most places the naturall tyde, to wit, a southwest and northeast Moone the highest water.

How these lands ly one from the other, and from other lands.

FROM the west point of Forteventura to the Iland of great Canaries east and west 19 or 20 leagues.
From the north point of the Canaries to Punte de Nago the northeast point of Teneriffe westnorthwest 21 leag.
From Punte de Nago to Garrichica westsouthwest and southwest and by west 8 or 9 leagues.
From Teneriffe to Ile de Palma westnorthwest 20 leagues.
From the west end of Teneriffe to Gomera west 5 leagues.
From the Palma to Ferro south and by west 13 leagues.
From Great Canaries to Salvages northnorthwest 40 leag.
From

From Garrichica to Salvages northnortheast 29 or 30 leag.
 From Teneriffe to the Ile de Madera north 72 leagues.
 From Great Canaries to the east end of Madera north and
 by west 85 leagues.
 From the Palma to Madera north and by east 53 leagues.
 From Salvages to the Serters of Madera north 40 leagues.
 The outermost of the Serters lieth from Madera 4 leagues.
 From Madera to S. Michiels northwest 136 leagues.
 From the west end of Forteventura to the Cape de Bajador
 southsouthwest 20 leagues.
 From Lancerota to the Cape S. Vincent n.n.e. 165 leagues.
 From Great Canaries to Cales northeast 240 leagues.
 From Great Canaries to the Cape S. Vincent, northeast &
 by north 210 leagues.
 From Great Canaries to Roxent northnortheast somewhat
 easterly 240 leagues.
 From Great Canaries to Cape de Finisterre northnortheast
 somewhat northerly 307 leagues.
 From Teneriffe to the Lizart n. n. e. distant 467 leagues.

From the Palma to Cape S. Vincent northeast 224 leagues.
 From Madera to Cape de Geer eastsoutheast 133 leagues.
 From Madera to Saffia east 130 leagues.
 From Madera to Cales eastnortheast 200 leagues.
 From Madera to Roxent northeast 173 leagues.
 From Madera to the Cape Finisterre northeast & by north
 somewhat northerly 245 leagues.

Heights.

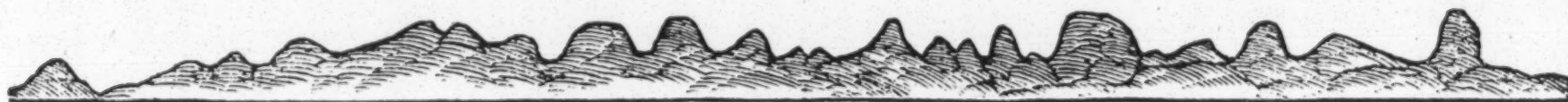
The Iland Lancerota lieth in 28 degrees 35 minutes.
 The north end of the Great Canaries lieth in 28 degr.
 The north end of the Teneriffe in 28 degrees 40 minutes.
 Ile de Palma in 28 degrees 52 minutes.
 Salvages in 30 degrees.
 The southermost part of Madera in 32 degrees.
 But the northermost in 32 degrees 30 minutes.
 Porto Santo in 33 degrees.

How these lands doe shew themselves at sea.

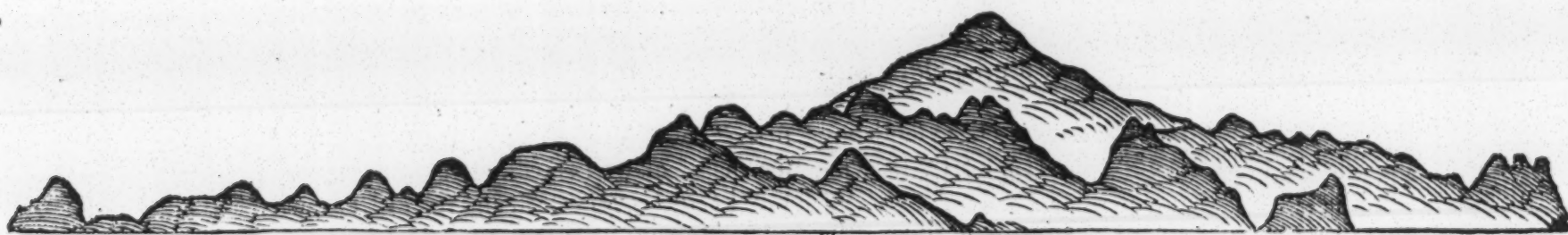
Hill with the Mizen.



Thus sheweth the south coast of Forteventura, when the hill with the white Mizen is northwest and by north about a league from you.



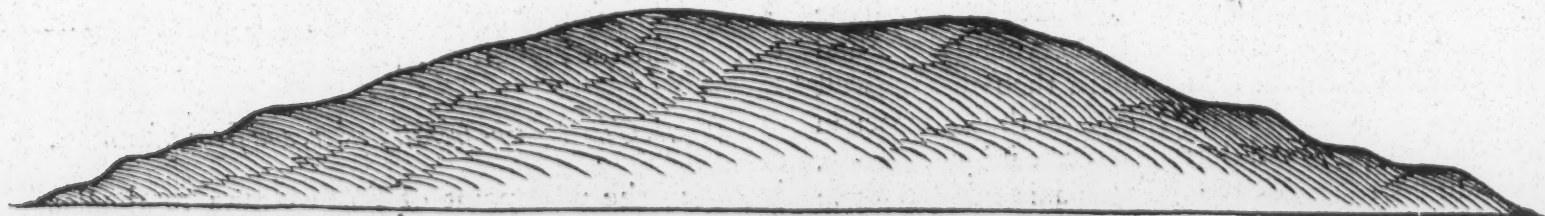
Thus sheweth the northwest side of Great Canaries.



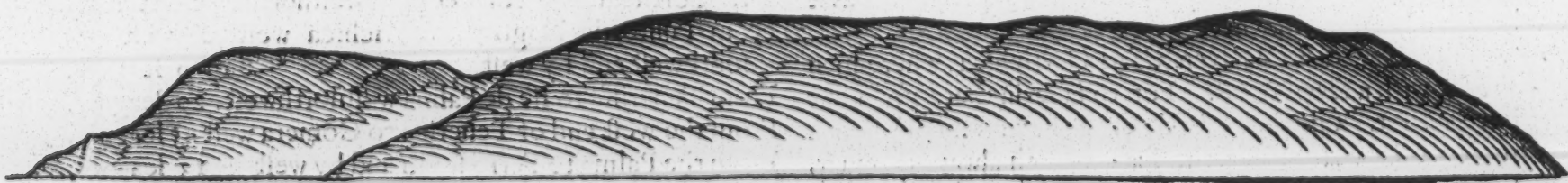
Thus sheweth Teneriffe, when the Pico is westsouthwest from you, and then you are open before the Road of S. Cruz.



Thus sheweth Teneriffe, when the Pico is southeast from you, and then are you open before the Road of Garrichica.

When the Palma is about east from you sixteen or seventeen leagues,
then it ariseth thus.When Porto Santo is south and by west from you about nine leagues,
then it sheweth it selfe thus.

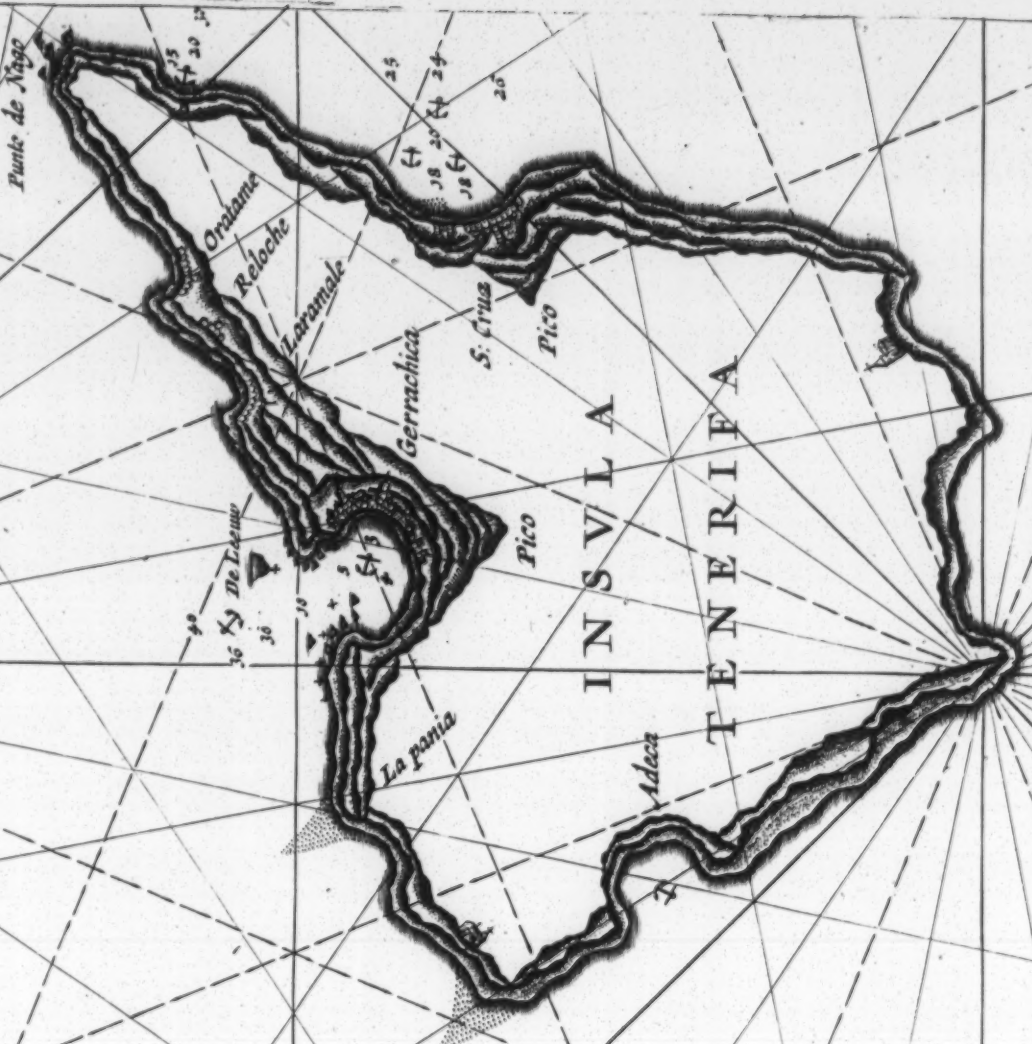
Thus sheweth the Iland Palma being south and south and by east nine or ten leagues from you.

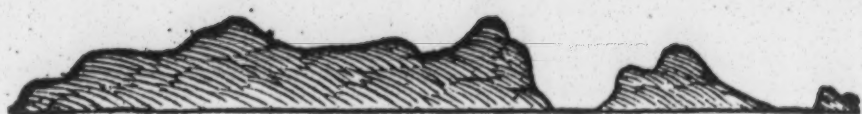


Thus sheweth the Iland Palma being southwest and by south foure or five leagues from you.

When

De Eylanden
Teneriffa
Palma Gomera-
en Ferro

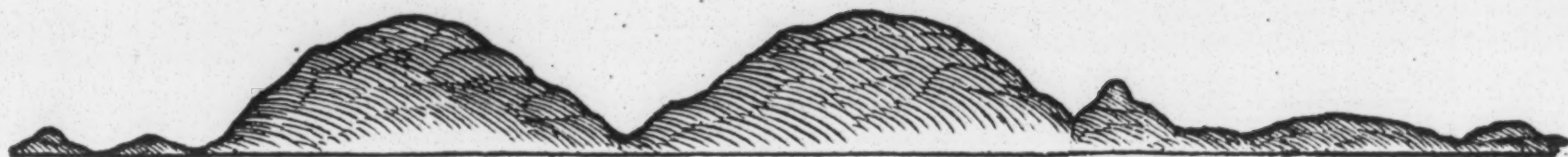




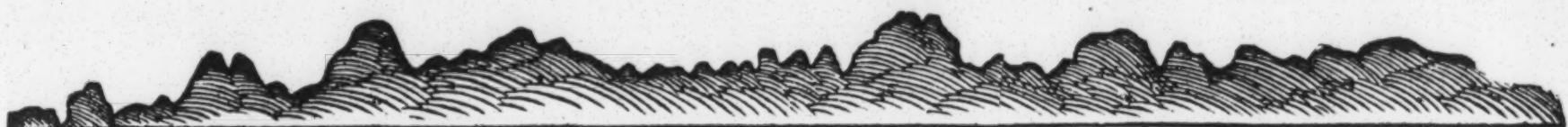
When Salvages is eastnortheast five leagues from you, it ariseth thus.



When Salvages is eastnortheast five leagues from you, it sheweth is selfe thus.



When Porto Santo is about south, five or six leagues from you, then it sheweth is selfe thus,



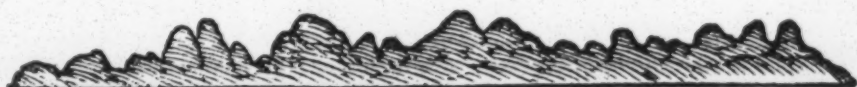
Thus sheweth the Iland Madera, when you come from the northwards, and that the middest of the land is ten or twelve leagues from you, the southeast end is very ragged when you are neere by it; the northwest end is a steepe oint going sloping downe.



Thus sheweth the Iland Madera being southwest from you.



When Madera is south from you sixteen leagues it sheweth is selfe thus.



When Madera is westsouthwest from you thirteen leagues, it ariseth thus.

C H A P. I V.

Of Porto Santo, Madera, and the Azores Islands.

Porto Santo.



From the Cape Saint Vincent southwest and by west 140 leagues, and from the Cape de Finisterre southsouthwest, and southwest and by south 232 leagues, lieth the Iland Porto Santo, lying southeast and northwest, upon each end of this Iland lieth a great rock. The Road is on the southwest side, to the eastwardes of the ragged rock, before a little haven where men may ly land-lockt with boats.

Madera. Serters.

The Iland Madera lieth from Porto Santo southwest sixteen leagues. Southwardes from the east point of Madera, ly three small rocky Ilands, being called the Serters, the northermost is the smallest, and lieth about a league from the land from the foresaid point, the southermost is the greatest, and lieth foure leagues from the land. Hee that commeth from the northwardes, or from Porto Santo, may faile through betwixt them and the point of Madera, it is there betwixt them broad and wide, and also cleane and cleare every where, onely at the foresaid east point of Madera lieth a suncken rock, whereof men must take heed.

S. Cruz.

At the south side of the Iland before the Towne S. Cruz is a good Road in twenty fathome, but before Fonsiall is the chieft Road for to lade: to the westwardes of the towne lieth a great rock with a crosse called the Lion, by it is the best lying in thirty or forty fathome.

Marafilo.

At the southwest side before Marafilo is also good anker in sixteen or eighteen fathome. In all these foresaid places is good ground for to anker in.

Salvages.

Betwixt Madera and Teneriffe lieth the little Iland Salvages, to wit, south from the Serters forty leagues. North from the northeast point of Teneriffe seven and twenty leagues, and northnorthwest from the northeast point of Great Canaries, forty or two and forty leagues, it lieth southwest and northeast; and is about a halfe league long. The south-

west end of Salvages is fowle farre off into sea, therefore runne rather about to the eastwards of it then to the westwards. Thee or foure leagues southwest from that point, amongst otier rockes, lieth one great rock which sheweth a farre off like a Saile. Vnder the southeast side of the Salvages is a good road for a northwest and west wind.

Madera and the Iland S. Michiels ly northwest and south-east 135 leagues distant. At S. Michiels, the Road is at the southwest side of the Iland, when you come about one of the two pints, either from the east or west, then you shall see two little townes. Before the westernmost called Punte de Gada, or Punte Alagato, is the Road in twenty, and five and twenty fathome.

S. Michiels

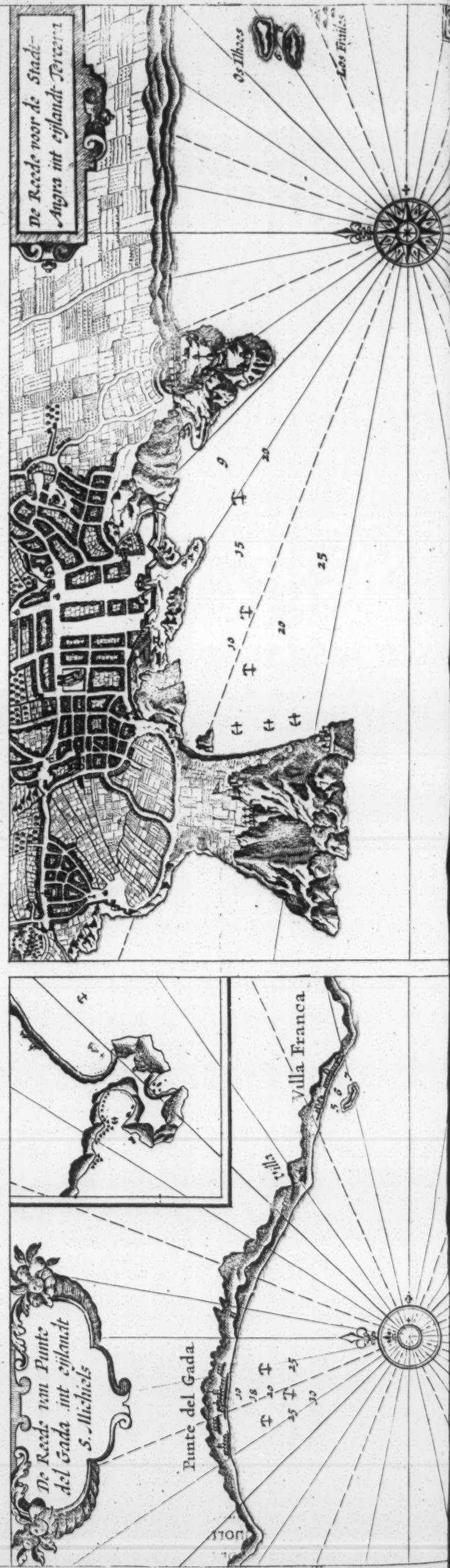
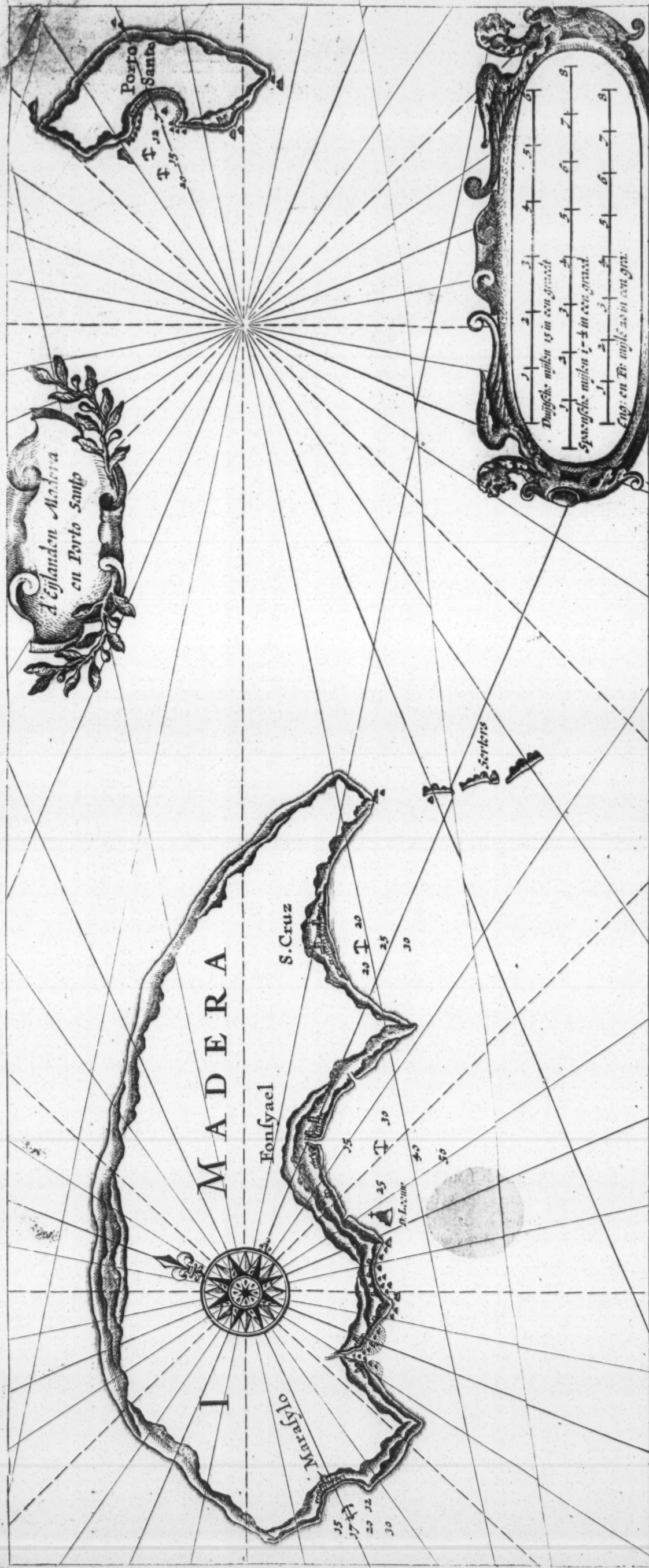
Punte de Gada.

Before the easternmost little towne lieth a little Iland, betwixt that and the land of S. Michiels it is five, sixe and seven fathome deepe. Betwixt these two little townes, the coast lieth westnorthwest and eastsoutheast.

From S. Michiels to Tercera the course is northwest and by west foure and thirty leagues. Vnder Tercera the Road is on the south side of the Iland, to the westwardes of the rocks, right before the towne Angra, betwixt two points that lye out, upon each of them standeth a Castle for defence of the ships which ly there in the Road, the westernmost of the two points lieth a good wayes further out to seawards then the easternmost, and hath upon the end of it, two very high hills, called Brafill; when you come out of the sea, either from the eastwards or the westwards, it seemeth a farre off as if it were asunder from the land. These two foresaid hills upon the point of Brafill, are so high, that in cleare weather men may see from thence sixteen or seventeen leagues farre off into sea. Vpon it stand two pillars, which men may see every where in the towne Angra, and a watchman thereby for to keepe watch, and to give them of the towne warning of the shippes that come about the Iland. As many shippes as he seeth come from the westwards or the southwards, that is, from the West-Indies, Brazill, or the Portugalls Indies, so many Flagges he setteth up upon the pillar towards the west; when hee seeth more then five ships; then he setteth up a great Flagge, which signifieth a whole Fleet.

Angra.

Likewise



Likewise he doth the same upon heother pillar towards the east, for the shippes which he seeth come from the east, from Portingall or from the northwards, so that there cannot a shippe come thereabouts, but men may see it presently by that token in every corner and street of the towne.

For to saile
into the
road of
Tercera.

Hee that commeth from the eastwardes, or the northwardes, and is bound into the road of Tercera, let him runne faire by the land of the east pirt, and alongst by it unto the two little Ilands, called the ltheos, which ly a little to the eastwardes of the road, about a bow shot one from the other. Men may runne alongst to the southwardes of these Ilands, or to the northwardes of them, as they will, and also betwixt them both. Betwixt these little Ilands & the maine land of Tercera, it is a great Cannon shot broad, and fiftene, and sixtene fathome deepe; through betwixt the little Ilands it is five and fixe fathome deepe cleane sand-ground. Somewhat to seawards of these little Ilands, ly three or foure rockes above water, caled Los Frayles. Being past these foresaid little Ilands, you must saile to the westwardes, untill that you come neere to the foresaid point of Brasill, a little to the eastwardes of it you must ancker before the towne of Angra in ten and twelve fathome, or els men lay their sea-ancker commonly in sixteen, and their smaller ancker towards the land in eight or nine fathome. Men ly there landlockt for a southwest, west north, and northeast, and also for an eastnortheast wind, but a southeast wind bloweth there flat open in. On the west side of the point of Brazill is also a great sandy Bay for to ancker in, before a village called Saint Martin.

Los Fray-
les.

Three leagues to the eastwardes of the towne Angra, lieth a bight called Porto Iudeo, there the Spaniards landed with their forces when they tooke in the Iland from the Portingalls.

Porto
Iudeo.

He that will saile from Tercera to Fayall, let him set his course westsouthwest to the east point of S. Georges, which is from thence ten leagues asunder. Further betwixt the

Pico and S. Georges through to Fayall are sixteen leagues, it lieth most westnorthwest through betwixt them, the Iland Fayall lieth to the westwardes of the Iland of the Pico a great league asunder off from it.

He that will ancker in the road of Fayall, let him ancker right before the village of Fayall in fourteene or fiftene fathome, there is sand-ground; but there goeth a hard tyde both of flood and ebbe.

On the southwest end of the Iland Fayall lieth a little haven; for to saile in there, you must runne in by the southwest point, so long about by the shoare, untill that you see the haven open, saile alongst about by the southwest point, untill that you come in the narrow, betwixt the rockes which ly off from the west side, so soone as you come within the rockes, let presently your ancker fall in five fathome, & bring hawfers on the east side on land, fast to the pales, which are there made for the purpose. The haven is little, so that men may ly in it with no more then with foure or five ships. Further in it is shewld water.

How these lands ly one from the other, and from other lands.

From S. Michiels to Tercera northwest and by west 34 leagues.

From Tercera to the east end of S. Georges westsouthwest 10 leagues.

From the east end of S. Georges to Fayall westnorthwest 16 leagues.

From Saint Michiels to the Cape de Finisterre eastnorth-east 247 leagues.

From Tercera to Roxent, or the River of Lisbon east at least 267 leagues.

From Tercera to Cape de Finisterre eastnortheast, and east and by north 280 leagues.

From Tercera to the Lizart northeast & by east 387 leagues.

How these lands doe shew themselves at sea.



Thus sheweth the Iland S. Michiels on the north side.



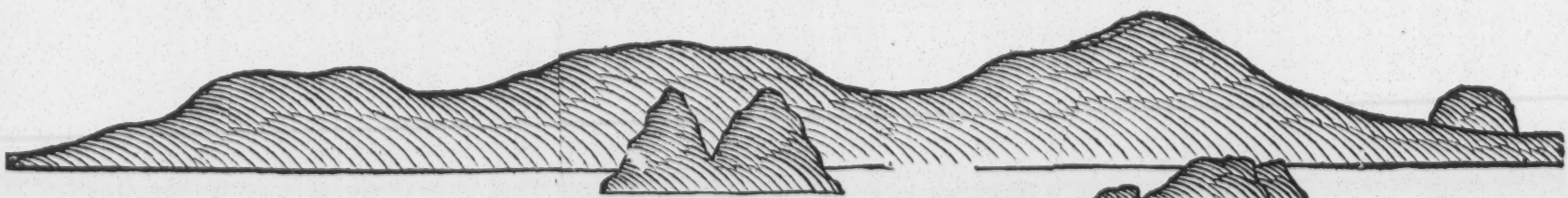
Thus sheweth the Iland of Tercera when it lieth east and by south about seven leagues from you.



When Tercera is foure or five leagues south west from you, then it ariseth thus, the west end of this Iland Tercera is higher then the east end, thereby it is indiffernt good to be knowne.

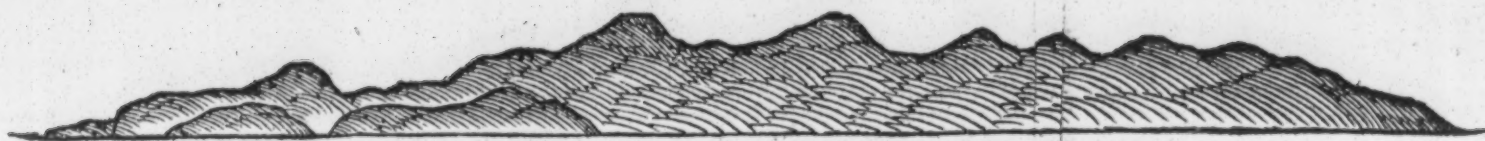


Thus sheweth Tercera on the north side.

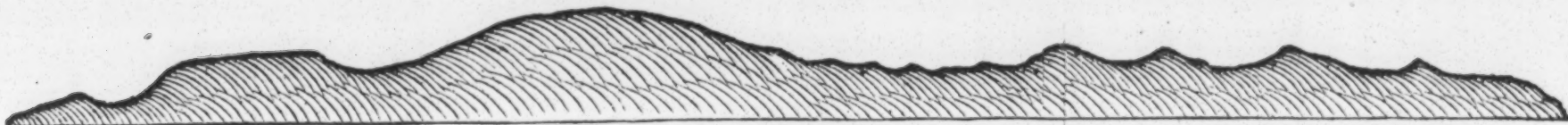


Thus sheweth Tercera on the south side when you saile along by it.

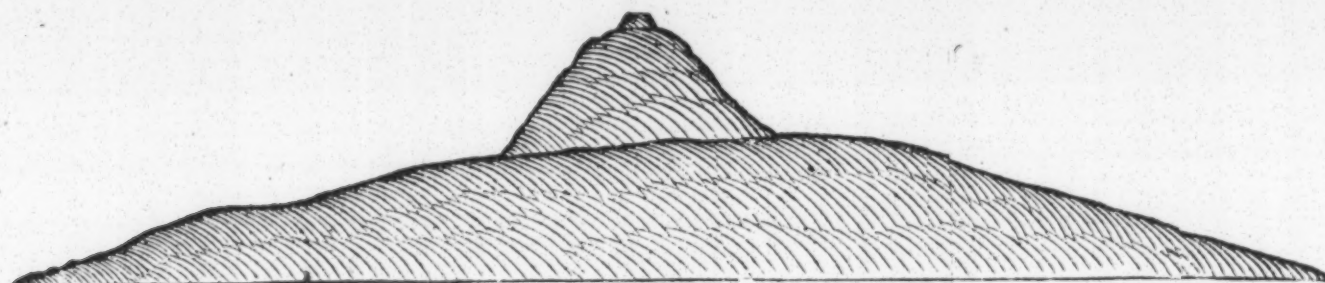
Thus



Thus sheweth the Iland S. Georges when it lieth southsouthwest from you seven leagues.



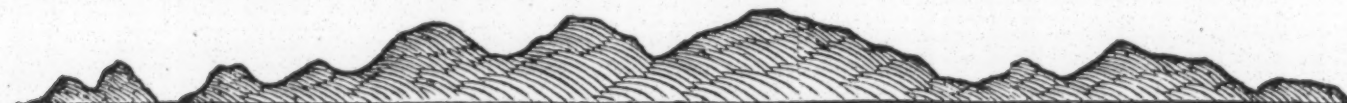
When the west end of S. Georges is south and by east, and the east end southeast from you, it sheweth it selfe thus, being eight or nine leagues off from it.



When the Iland the Pico is southeast from you, it sheweth it selfe thus, the high Pecke you may see about forty leagues off from it at sea.



The Iland Fayall sheweth it selfe thus when it is south from you eight or nine leagues.



When the Iland Gratio lieth westsouthwest foure leagues from you, then it is seth in this forme.

The end of the sixth Booke.

